



**Chroma**

Advancing Excellence

**2022**

**ESG**

**Sustainability  
Report**

ENVIRONMENTAL  
SOCIAL  
GOVERNANCE

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**About the Report**



About the Report



About the Report

Chroma followed the Global Reporting Initiative Standards (GRI Standards) announced by the Global Sustainability Standard Board (GSSB) to reveal the details of Chroma’s operational performance in 2022 and future plans to all the Chroma stakeholders concerned and present the actual Chroma sustainable development philosophy and goals. Chroma will continue to publish information about social, corporate and environmental governance in the future. This will ensure that the public can understand our overall business activities and the prospect of continuous progress.



Principles for Compilation of the Report

This report has been prepared in accordance with the requirements of the GRI Standards version 2021 (GRI Standards 2021) and the sustainability metrics of the Sustainability Accounting Standards Board (SASB). Please refer to Annex 1 GRI Content Index and Annex 2 SASB Index for the details.



Disclosure Time

This report discloses Chroma CSR activities and performance with respect to corporate governance, environmental protection and social responsibility for 2022 (January 1 to December 31, 2022) as a response to the issues that are of concern to stakeholders.



Scope of the report and boundaries GRI 2-2 and GRI 2-4

The information and data disclosed in this Report focus primarily on Chroma ATE (including the plants in Taoyuan, Hsinchu, and Kaohsiung), which is consistent with that of 2021. They cover Chroma’s performance in the aspects of corporate governance, environment and society. However, financial information is presented in terms of the consolidated revenues and is consistent with the financial report.

Headquarters: No. 88, Wenmao Road, Guishan Dist, Taoyuan City, Taiwan Plants:

- Taoyuan Plant (No. 68, Huaya 1st Rd, Guishan Dist, Taoyuan City, Taiwan)
- Hsinchu Branch (6th Floor, No. 5, Keji Road, Science Industrial Park, Hsinchu City, Taiwan)
- Kaohsiung Branch (No. 1, Beineihuan East Road, Nanzi Dist, Kaohsiung City, Taiwan)



Information and Data Quality

All the statistical data disclosed in this Report come from the relevant statistical surveys conducted by Chroma. The figures have been verified by a certified public accountant prior to publication and are presented in the way commonly used for such statistics. The amounts shown in the financial statements in this Report are in NTD, and the other relevant performances are expressed in international common indexes. If projections or assumptions are made, they are indicated in the relevant text. Any changes from the previous version are indicated in the relevant text of this report.



Report verification GRI 2-5

This report has been prepared in accordance with the GRI Standards (2021), with disclosures corresponding to the Sustainable Development Best Practice Principles for TWSE/TPEX Listed Companies (Taiwan) and the UN Sustainable Development Goals (SDGs).

Bureau Veritas CPS Taiwan was commissioned to verify this Report and a statement of assurance was provided. This Report has been found to be compliant with the standards required by GRI Standards and AA 1000/Type 1/ Moderate.



Contact Information GRI 2-3

Thank you for taking the time to read the Chroma Sustainability Report for 2022. This Report has also been submitted for GRI content indexing and material issue disclosure services.

Date of publication: June 2023 (to be continued each year)

If you have any suggestions or inquiries regarding this Report, please contact us.

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***From the Chairman***





From the Chairman

Despite the three-year long challenge of the COVID pandemic and intense global political and economic instability, the world got back on track in 2022. We have all demonstrated resilience and flexibility and have moved forward. In 2022, the annual accumulated consolidated revenue of the Chroma Group rose to NTD22.1 billion, 25% more than in 2021. In addition to a brand value growth of 19% over that of 2021, we have been ranked as one of the Top 40 Best Taiwan Global Brands for four consecutive years.

**Continual innovation towards net zero**

In response to the severe climate changes that are challenging our planet, we have set several different targets in three of the aspects of total environmental management: climate change, green production and design, and the prevention of pollution. By quantifying GHG and keeping an inventory of emissions in accordance with the ISO 14064-1:2018 standard, we have further established energy conservation measures. Additionally, by passing the ISO 14001:2015 environmental management system (EMS), we standardize the operation of all pollution sources to improve environmental protection in compliance with all the laws and regulations.

As a high-tech, low-emission, and low-energy consumption business, “net zero emissions” is a sustainability issue of constant concern to Chroma. We want to become a “carbon handprint” in the industry chain. A carbon handprint refers to action that is recognized as positive towards climate change and the reduction of carbon emissions, as opposed to a carbon footprint. The effect of a carbon hand-print is far reaching. We offer regenerative tests and measurement solutions to help customers reduce carbon in manufacture and production. Carbon handprint processes contribute to global efforts to halt climate change. Over the past three years, the regenerative test and measurement solutions sold by Chroma have effectively reduced carbon emissions by nearly 140,000 tCO<sub>2</sub>e. This is about the same amount as 359 Daan Forest Parks would absorb. Based on EU Taxonomy, EU taxonomy-eligible revenue of Chroma HQ accounted for 41.8% of total revenue. Introduction of the “Chroma Green Label” encourages employees to develop and produce new ESG-efficient products, to digitize equipment and reduce energy consumption, and to initiate the design of products that have low environmental impact at all stages of their life cycle.

On our move towards green production we started with green design and then went on to production, office environment checks, and process improvements. We are now moving from low-carbon to net-zero.

**Care through sharing and collaboration through trust**

Employees are our most important corporate asset. They are our partners and we value the physical and mental health of every one of them. We have built multifaceted internal communication channels based on a “treating employees as family” concept, and offer a range of friendly benefits that are better than any of the statutory requirements. In 2022 we implemented the ISO 45001 occupational health and safety (OH&S) management systems to lower the likelihood of work-related injury and ill health and to build a safe and reliable workplace environment for our employees. We have also established a well-planned education and training system for multifaceted development to enhance workforce competence and competitiveness. This ensures that each employee is the right person in the right place, enabling everyone to fulfill their potential and demonstrate their value.

In addition to cultivation and development of the industry and leading emerging markets to realize innovation, we also actively implement education in science, technology, engineering, and mathematics (STEM) and engage

in many social welfare activities. In our efforts to encourage STEM education in the younger generation, we participate in the “Taiwan Railways of Popular Science” to foster and develop potential sci-tech talent. Our Premier University Plan maintains active technology exchange with graduate students at top local universities. This allows us to disseminate practical R&D knowledge in electrical and electronic engineering that enables the development of expert talent. Senior under-graduates also make early connection with the professional market. The prize presentations at the 2022 1st Chroma Precision Machinery and Measurement Technology Paper Awards encourage young students to engage in test and measurement and the R&D of precision engineering. It facilitates collaboration between industry, government, academia, and research institutions and promotes improvement and innovation in precision machinery and measurement technology. In a spirit of giving back to society some of what we have taken, we organize charitable activities to collect usable material and goods for reuse and donate them to those in need. We support protection of the ocean and engage in “Coastal Clean-up” and the promotion of environmental education by real action. Chroma integrates and donates resources to society to contribute and extend our influence to social value.

**We drive future technology to help create a better world**

We began publishing an annual CSR report in 2014 and started a carbon inventory seven years ago. We set 2022 as our “ESG year zero” and established the ESG Office and the Chroma Cultural and Educational Foundation. In doing this we hope to build a green Chroma in line with the five major aspects of sustainable development: technology and product, supply chain and manufacture, a friendly and healthy workplace, social influence, and a sustainable environment. In August 2022, the chairman personally led all senior officers in a vow to maintain their ESG responsibilities at the ESG Kick-off Meeting. ESG is the responsibility of everyone and sustainable operation is essential for any publicly offered company. Chroma, which has a net worth of more than NT\$10 billion, distributes products worldwide to create value and resolve pain points for customers. This has won us trust and many long-term partnerships worldwide. It is our responsibility to instill ESG in each employee and to contribute to society and the environment as a corporate world citizen.



Chroma Chairman, Leo Huang

***Our Achievements***

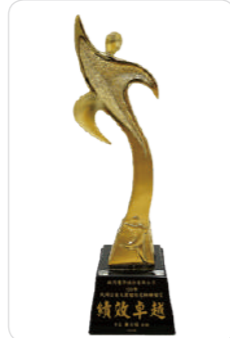


Performance in sustainable environmental protection (E)

1. After our first "Climate-Related Financial Disclosure Report" was published in 2022, we set targets and formulated countermeasures and counteractions. The progress and achievement of these counteractions will be systematically disclosed.
2. Parts for the close-loop control in new-generation PSUs can be reduced by up to 50% compared to those of the former-generation PSUs. Enhancement of energy conversion has allowed the overall efficiency of the new-generation 61815 PSU to be raised from 75% to 87% compared to the earlier generation 61512 PSU.
3. In 2022 we received the National Enterprise Environmental Protection Award of the Environmental Protection Administration as well as an Outstanding Performance in Green Procurement award from the Taoyuan City Government.
4. The Chroma HQ Building passed the EEWH Gold certification for green buildings.
5. We joined "Project Blue" organized by Business Today to support marine environmental protection.
6. We reduced industrial waste by 4.97% over 2021.
7. Starting from production and office environment checks, production process improvement, and green product design, we will gradually move from low-carbon to net-zero.
8. In October 2022 the Chroma ESG Working Team completed a first assessment to identify climate change risks and opportunities. Each department sets KPIs for relevant work and team members will hold progress follow-up meeting each month to ensure all KPIs and tasks have been accomplished.



Chroma received the National Enterprise Environmental Protection Award from the Environmental Protection Administration in 2022 as well as an Outstanding Performance in Green Procurement award from the Taoyuan City Government.



The Chroma HQ Building passed the EEWH Gold certification for green buildings.



"Project Blue" Coastal Clean-up



Press conference of "Project Blue" held by Business Today.



Coastal Clean-up Round 2



Chroma Culture and Education Foundation: Hours of volunteer service learning.

Social (S) Performance

1. In addition to award of the Badge of an Accredited Healthy Workplace, we also received the 2022 National Outstanding Healthy Workplace-Energetic Workplace Award.
2. Kaohsiung Branch passed the AED Ready Workplace accreditation.
3. The occupational accident rate in 2022 was 0.27%.
4. Workplace monitoring non-conformance in 2022 was zero.
5. The average number of training hours per employee in 2022 was 10.34 hrs.
6. The average range of salary raise in 2022 was 8.82%.
7. The number of employees who applied for unpaid parental leave in 2022 was 13; the average return to work rate was 75%; the retention rate was 85.71%.
8. Industry-academia collaboration supports Formula Student Taiwan (FST), promotes student formula engineering design competition safety, sponsors student formula teams, the Premier University Plan, the Chroma Elite and Educational scholarships, and the industrial technology graduate programs.
9. Social welfare and social engagement (Fun & Love with the Chroma Charitable Donation Campaign, Taiwan Railways of Popular Science, Business Today "Coastal Clean-up 1095", Chroma Breach Cleanup Round 2, and the Township Handwashing Campaign).



The 2022 Badge for Accredited Healthy Workplace.



The 2022 National Outstanding Healthy Workplace-Energetic Workplace Award.



The Kaohsiung Branch passed the 2022 AED Ready Workplace accreditation.





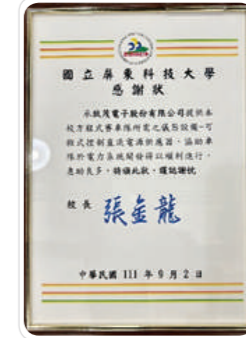
The 2nd Taiwan Student Formula Competition 2022



FST Certificate of Appreciation for supporting FST events



The National Ching Hwa University Certificate of Appreciation for equipment sponsorship



The National Pingtung University of Science and Technology Certificate of Appreciation for equipment sponsorship.



The National Taipei University of Technology Certificate of Appreciation



FST Certificate of Appreciation



New Car Presentation of National Taipei University of Technology



Chroma Chairman Leo Huang and winners of the 1st Chroma Precision Machinery and Measurement Technology Paper Award



Officials at the 1st Chroma Precision Machinery and Measurement Technology Paper Award



The Chroma Elite Scholarship



The 2022 Chroma Elite Scholarship



Taiwan Railways of Popular Science



NSTC Certificate of Appreciation for the Taiwan Railways of Popular Science



The National Taiwan University Certificate of Appreciation for equipment sponsorship



The National Cheng Kung University Certificate of Appreciation for equipment sponsorship

Our Achievements



Fun & Love with the Chroma Charitable Donation Campaign



Township Handwashing Campaign

Corporate Governance (G)

- 1.No non-compliance with business integrity or corruption was reported in 2022.
- 2.The 2022 revenues were NT\$22,067,242 thousand, a new historical high and 25% more than in 2021.
- 3.Chairman Leo Huang was named one of Top 100 Best-Performing Business Leaders in Taiwan by the Harvard Business Review (HBR) and earned the 15th Arts and Business and the 2022 Industry Contribution Semiconductor Equipment and Materials International (SEMI) awards.
- 4.Named as one of the Top 40 Best Taiwan Global Brands in 2022
- 5.Received the Featured Green Tech Company, the EE Asia and the Taipei AMPA ESG Achievement Green Mark awards.
- 6.Won the 2023 Taiwan Excellence Awards for two products.
- 7.There were no information security incidents that harmed Chroma, nor were there any Chroma-proven external complaints, or reports of complaints from the supervisory authorities.
- 8.Integrity and probity are the core values of our corporate culture. The business activities of all our officers and employees are based on business integrity and ethics.
- 9.Chroma upholds zero unethical behavior and zero corruption as ultimate goals.
- 10.A female director will be elected in 2023 to achieve Board composition diversity.
- 11.The level of information security and defense will be further raised in five technological aspects: identification, protection, detection, response, and recovery, using a range of information security management solutions and processes.



Chairman Leo Huang was named one of the Top 100 Best-Performing Taiwan Business Leaders by the Harvard Business Review 2022.



Chairman Leo Huang earned Bronze at the 15th Arts and Business Award ceremony.



Chairman Leo Huang also received the Industry Contribution Award 2022 from Semiconductor Equipment and Materials International (SEMI).



Named as one of the Top 40 Best Taiwan Global Brands in 2022.



Received the Featured Green Tech Company Award at EE Asia.



Awarded the Taipei AMPA ESG Achievement Green Mark.



Won 2023 Taiwan Excellence Awards for two products. (Left) Programmable DC Power Supply (Chroma 62000D) (Right) The Chroma 71803-3 2D Color Analyzer

**Corporate  
sustainability**



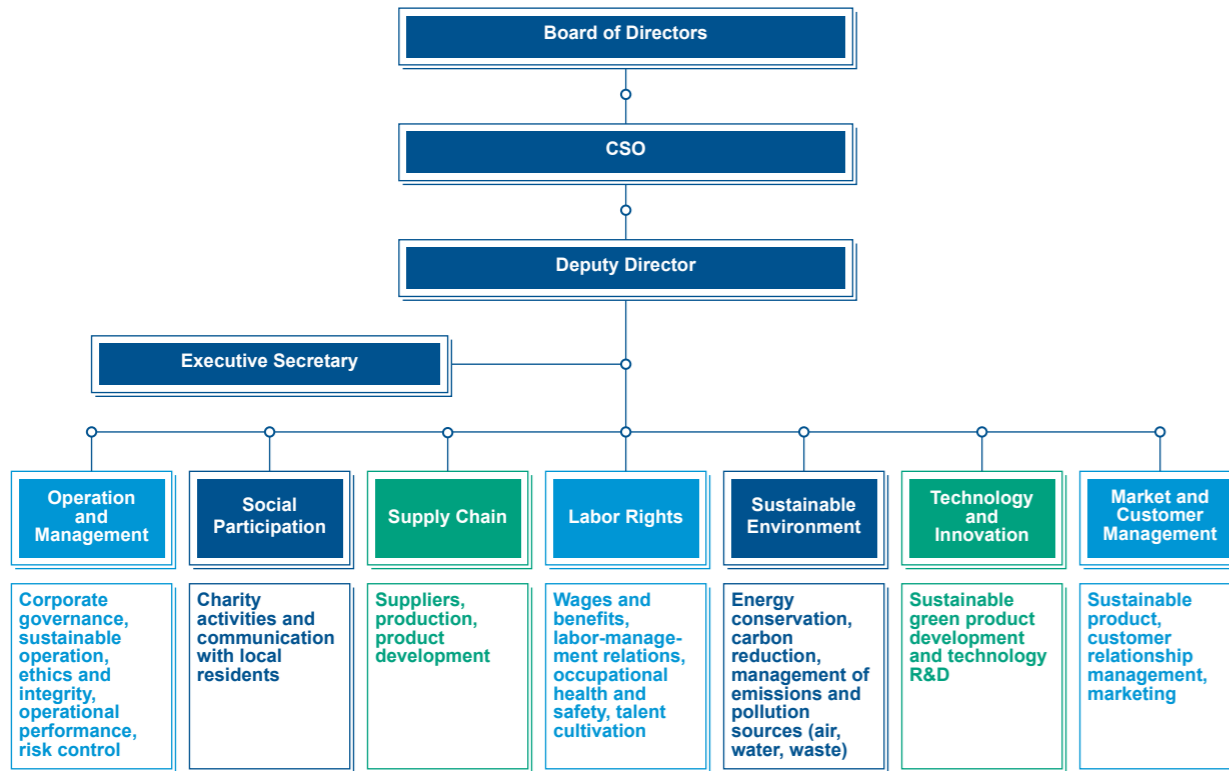


### 1.1 Sustainable development visions and strategies

In an effort to fulfill our corporate social responsibilities and stay true to our philosophy for sustainable operations, the Board of Directors (Board) approved the establishment of the Chroma Culture and Education Foundation, the Chroma ESG Office, and the Chroma ESG Working Team in 2022 to practice sustainable development in terms of the following seven aspects: corporate governance, product and innovation, a happy workplace, social engagement, a sustainable environment, suppliers and partners, and climate change. We also set the UN Sustainable Development Goals (SDGs) as the direction for the implementation of our sustainable development strategy. Despite the challenge of the three-year COVID pandemic and global political and economic instability, we managed to maintain steady development through resilience and flexibility to sustain our brand commitment: "Develop globally leading products as a world-class enterprise". Continual innovation has earned us customer trust and created the Chroma brand value that allows Chroma products to continue shining on the international stage.

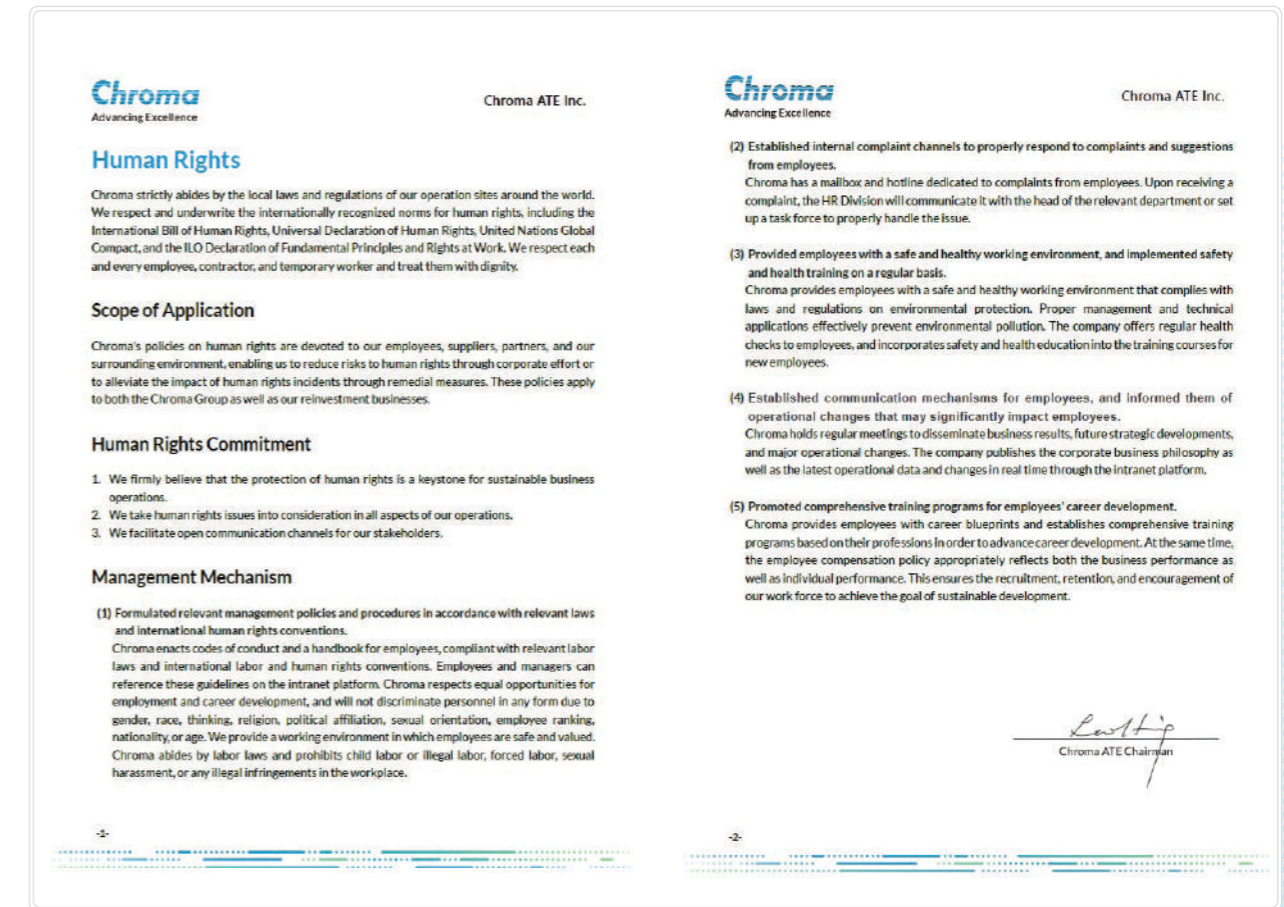
The Board reported the performance of ESG KPIs in Q4 of 2022.

#### The Board reported the performance of ESG KPIs in Q4 of 2022.



As a global corporate citizen we align ourselves with the spirit of the following principles and standards: the Responsible Business Alliance Code of Conduct (RBA-CoC), the Universal Declaration of Human Rights, the Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy of the International Labor Organization (ILO), the United Nations Global Compact (UNGC), the United Nations Guiding Principles on Business and Human Rights, and the OECD Guidelines for Multinational Enterprises. To practice ESG, the Board also passed the "Sustainable Development (ESG) Best-Practice Principles" to define the following four major principles: the enforcement of corporate governance, the development of a sustainable environment, the maintenance of social welfare, and enhanced CSR information disclosure.

We abide by local laws and regulations at all our worldwide operational locations; we respect and support internationally recognized human rights standards and principles, including the International Bill of Human Rights, the Universal Declaration of Human Rights (UDHR), the Ten Principles of the UN Global Compact, and the ILO Declaration on Fundamental Principles and Rights at Work. We treat all employees, contract and temporary as well as management assistants with dignity and respect. By establishing the following Human Rights Policy, that is also applicable to all Chroma businesses and investees, we commit to mitigating human rights risks and to lowering of the impact of human rights incidents with remedial measures in the environments where our company, its employees, suppliers and partners are located.



Chroma Human Rights Policy



## 1.2 Material topics and stakeholder engagement

GRI 2-29,GRI 3-1,  
GRI 3-2,GRI 3-3

We have identified material issues with reference to the GRI Standards and the four AA 1000 Accountability Principles: Inclusivity, Materiality, Responsiveness, and Impact. Additionally, based on the foundation set for stakeholder communications and feedback in accordance with the GRI Universal Standards 2021 and with reference to other international sustainability standards, such as SDGs, TCFD Recommendations, SASB Standards, and the Dow Jones Sustainability Indices (DJSI), we heard and analyzed the needs and expectations of stakeholders to identify and assess the significance of economic, environmental, and the social impact of material issues as reference for the planning of sustainable development strategies and as a basis for the information disclosures in this report.

Procedure	Content	Achievement
<b>Step 1.</b> Identify communication targets	A stakeholder questionnaire was distributed to the employees which placed emphasis on the five attributes of stakeholders in the AA1000 Stakeholder Engagement Standard (AA1000 SES): influence, tension, responsibility, dependency, and diverse perspectives. A review of the statistical analysis results allowed the Chroma ESG Working Team to categorize six stakeholder groups: investors (shareholders, Board), competent authorities, customers, suppliers, local communities, and employees.	<b>6</b> major stakeholder groups
<b>Step 2.</b> Collect sustainability issues	References 1.GRI Sustainability Reporting Standards (GRI Standards) 2.Climate-Related Financial Disclosures (TCFD) 3.17 SDGs and 169 targets 4.US Sustainability Accounting Standards Board (SASB) 5.Careful engagement with stakeholders allowed the working team to gather and list 24 sustainability issues.	<b>24</b> sustainability issues
<b>Step 3.</b> Investigate the significance of impact and influence of stakeholders.	The Chroma ESG Working Team were able to identify targets with close relationship and influence and investigate the significance of impact and influence of the six stakeholder groups on the 24 sustainability issues using the “2022 Chroma Stakeholder ESG Questionnaire”. The team collected 325 valid questionnaires, these included 29 from customers, 181 from employees, 23 from shareholders/investors, 2 from government agencies, 95 from suppliers, and one from the local community.	<b>325</b> valid responses
<b>Step 4.</b> Validate material issues	After reviewing the results from Step 3, the Chroma ESG Working Team selected 11 sustainability issues of medium and high impact for this year and reported them to the ESG Committee and Board.	<b>11</b> material issues
<b>Step 5.</b> Assess impact significance	Steps 1 to 4 were completed between October 2022 and January 2023, after which the Chroma ESG Working Team further assessed and scored the positive/negative impacts of these 11 material issues on economic, environmental, and governance and discerned the boundaries and their involvement in material issues of the value chain. It was found that all 11 material issues had significant impact.	<b>3</b> KPIs
<b>Step 6.</b> Validating the priority and disclosure content of the issues.	The Chroma ESG Working Team report included: countermeasures; the short-, medium-, and long-term targets; achievement and performance; and the approach of management to the issues based on requirements for the individual topics. The 11 material issues corresponded to a total of 14 GRI topics.	<b>14</b> GRI topics

## 1.Issue identification and stakeholder engagement

Addressing the needs and expectations of stakeholders is the critical path to sustainability and success for any enterprise. At Chroma, we believe that through exchanges with our stakeholders, we will be able to understand their needs and expectations and this will enable us to respond accordingly. Such exchanges not only help the Company to review and plan its short/mid/long-term strategies but also allow us to create value for our stakeholders as well as new opportunities for sustainable operations.

After all the stakeholders had been identified using the five attributes in the AA1000 Stakeholder Engagement Standard (2015) (AA1000 SES 2015): dependency, influence, responsibility, diverse perspectives, and tension. The major stakeholder groups were defined according to their importance. The results were used to assess the economic, environmental, social, and human rights significance of these issues for reference in planning sustainable development strategies and as a basis for information disclosures in this report. The process revealed the following major stakeholder groups: investors (shareholders, Board), competent authorities, customers, suppliers, local communities, and employees. There have been no significant changes in our primary stakeholders since the 2021 report was published. Regular and intermittent exchanges and engagement with stakeholders through many multifaceted channels revealed the expectations of the stakeholders. Stakeholder engagement was also a source of information about sustainability issues and impact assessment.

Stakeholder	Significance to Chroma	Approach and Frequency of Engagement
 <b>Investor</b> (including shareholders and the Board)	Create steady profit and ROI while also demonstrating sustainable governance.	<b>[Regular]</b> AGM (once a year), Board meetings (7 in 2022), annual report (once a year), financial statements (quarterly). <b>[Irregular]</b> Corporate website
 <b>Competent authorities</b>	Abide by laws and regulations, cooperate with the government on policies, and address the stakeholder expectations from Chroma.	<b>[Irregular]</b> MPOS, government documents and policy outreaches, onsite audits.
 <b>Customer</b>	Each customer feedback item is an important nutrient for development and CRM optimization. Analyze and review the comprehensive needs and opinions of customers to gain an in-depth understanding of them to facilitate subsequent improvements.	<b>[Regular]</b> Internal quality and review meetings, customer satisfaction survey <b>[Irregular]</b> Business visits, various sales meetings and technology review meetings.
 <b>Suppliers</b>	Each customer feedback item is an important nutrient for development and CRM optimization. Analyze and review the comprehensive needs and opinions of customers to gain an in-depth understanding of them to facilitate subsequent improvements.	<b>[Regular]</b> Supply conferences and guidance meetings are regularly held and suppliers are audited and rated periodically. <b>[Irregular]</b> Supplier grievance channels and supplier technology seminars.
 <b>Nearby communities</b>	Fulfill CSR, build social contribution mechanism through operations, solve environmental and social problems, create positive influence.	<b>[Irregular]</b> Complaint hotline



We care about the needs of employees and have built a friendly workplace environment. Hazard identification and risk assessment has been implemented to reduce potential accidents and encourage organizational coherence and commitment in our employees. Our health checkup system is being continuously optimized and steps have been taken to improve gender equality measures. We care for the health and protect the human rights of our employees.

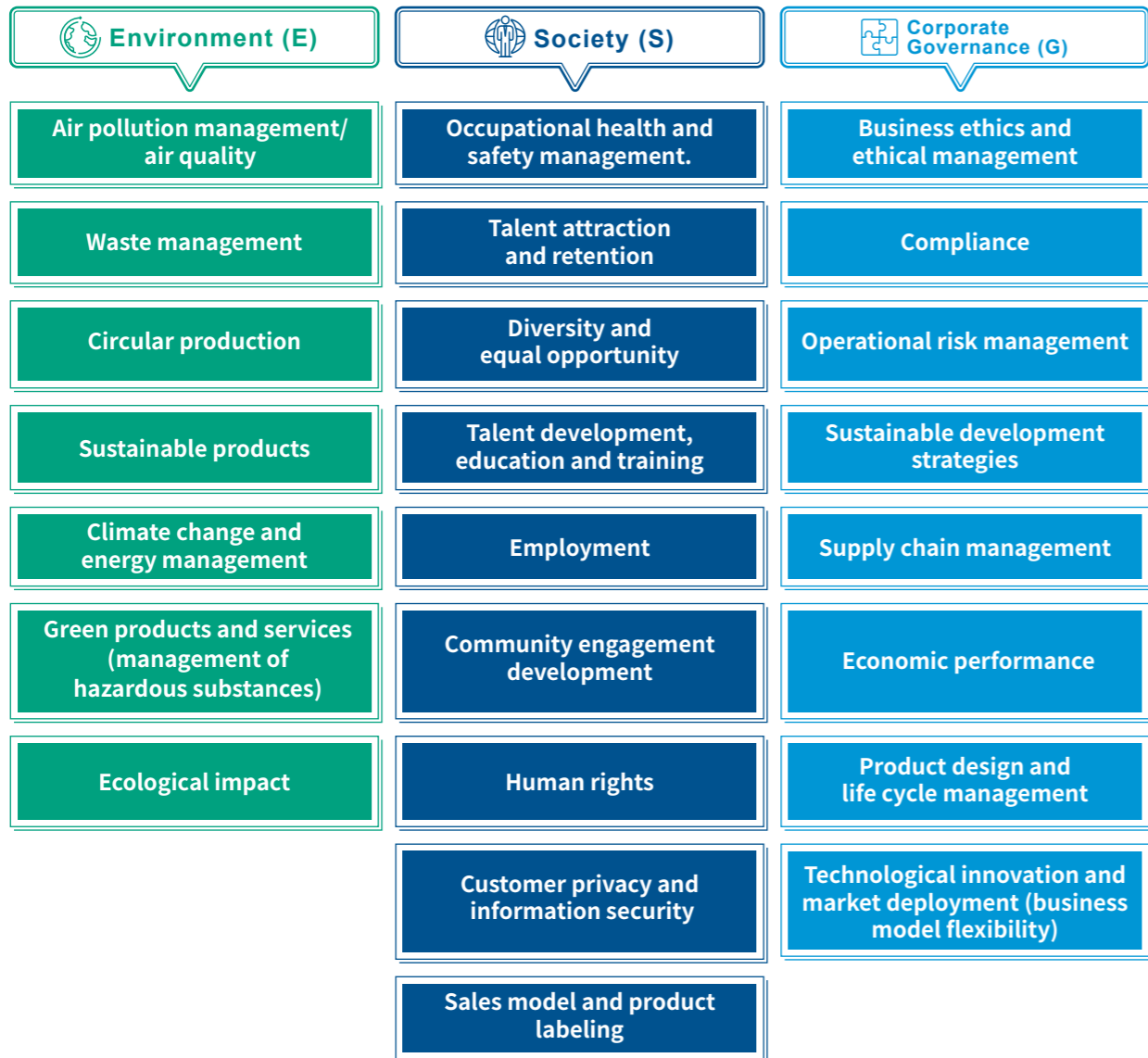
**[Regular]**  
Labor-management meeting and monthly/weekly/labor representative meetings at each plant.

**[Irregular]**  
Immediate supervisors, HRD responsible personnel, a corporate bulletin board, an employee suggestion box, employee seminars, employee grievance channels, training courses, and policy outreach meetings.

Collection of sustainability issues

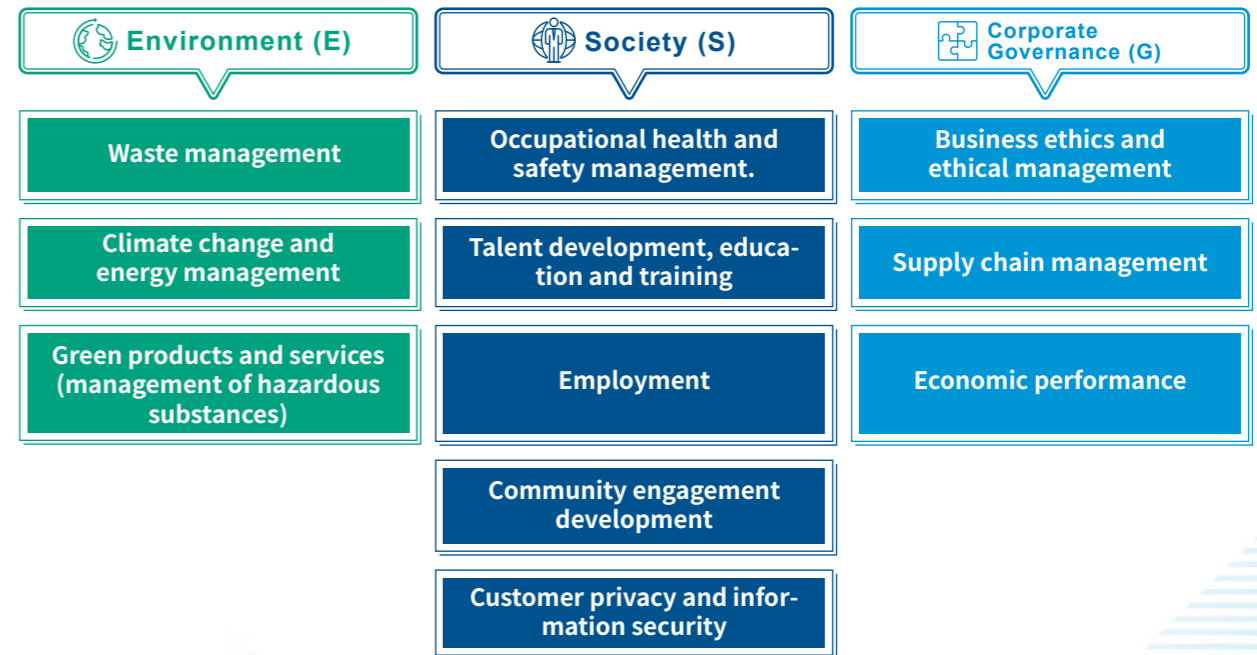
Find potential Chroma material topics. Sustainability issues, collected according to international sustainability standards and regulations (GRI, TCFD, SASB), the SDGs, and stakeholder interaction, were sorted into 24 topics. The impact of these issues was then investigated.

Sustainability Topic



1. Quantify questionnaire results

Based on the results of the stakeholder questionnaire, we considered the need to determine the importance of each issue. As shown in the table below, three environmental (E) issues, five social (S) issues, and three governance (G) issues show high impact. The results of the 2022 questionnaire indicate that the significance of stakeholder impact of "customer privacy and information security" started to gain importance. After prioritizing important issues, the Chroma ESG Working Team reported countermeasures; the short-, medium-, and long-term targets; achievement and performance; and management approaches of issues based on the reporting requirements for individual topic



Using the economic, environmental, and social impact of the 11 material issues as a basis, the Chroma ESG Working Team assessed and gathered the significance of their actual/potential, positive/negative impact and the likelihood of such impact.

(1) Impact quantification

The significance of ESG impact and positive/negative impact were rated by a score of between 1 and 5. Examples of results gathered by the Chroma ESG Working Team are as follows:

Material topic	Environment			
	Level of influence		Likelihood	
	Positive	Negative	Positive	Negative
Climate change (including GHG management)	4	2	4	5

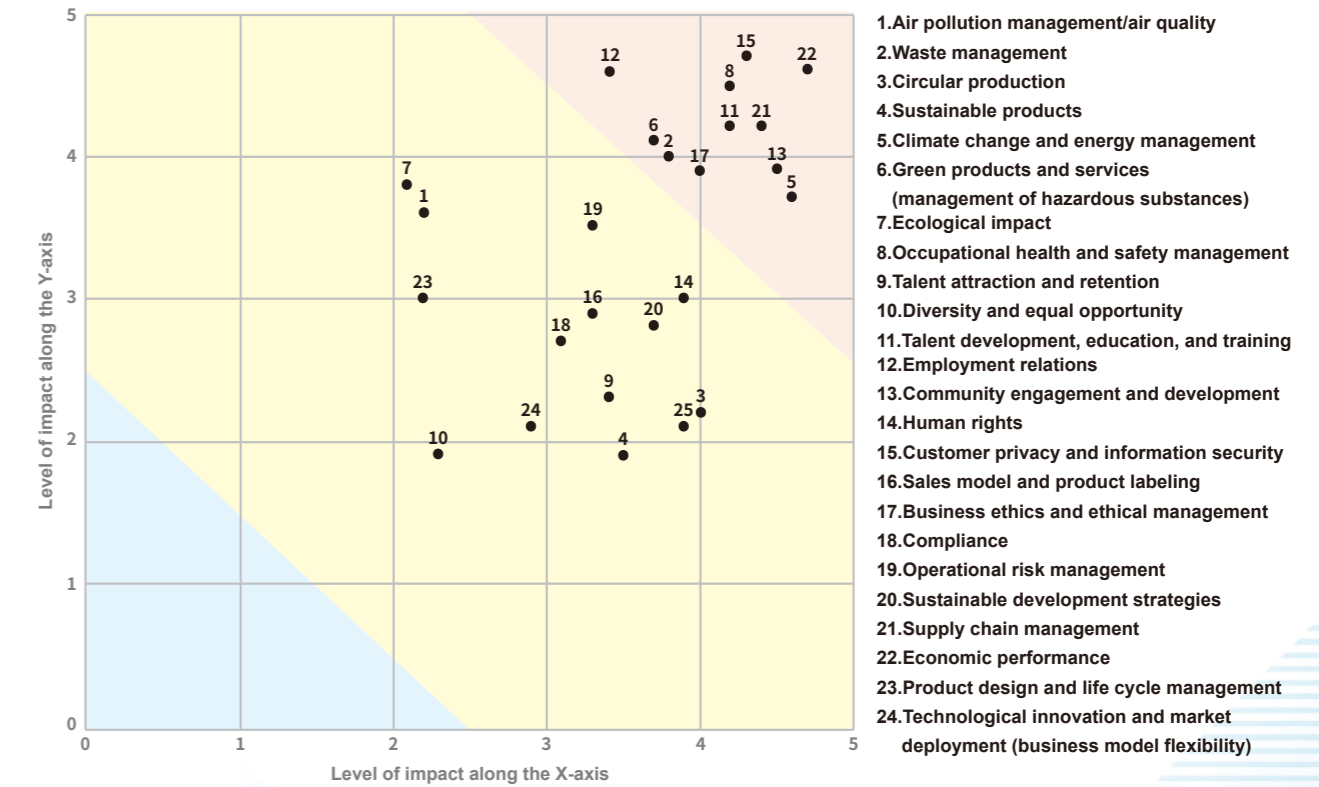
Material topic	Social (or human rights)			
	Level of influence		Likelihood	
	Positive	Negative	Positive	Negative
Occupational health and safety management.	5	3	4	2

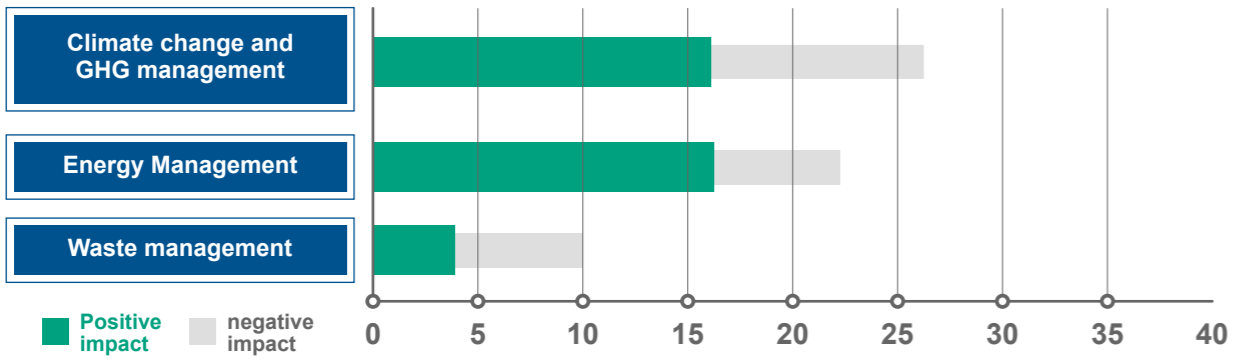
Material topic	Corporate governance			
	Level of influence		Likelihood	
	Positive	Negative	Positive	Negative
Economic performance	5	3	5	3

(2) Impact prioritization

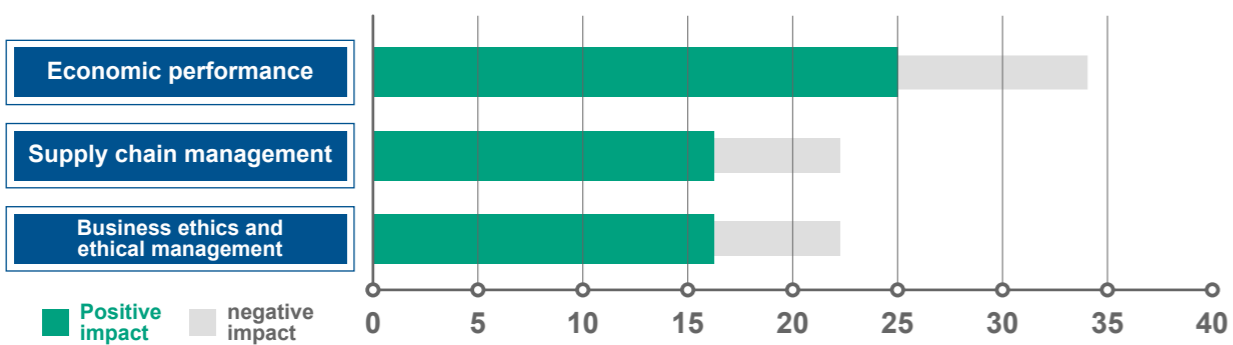
The results of impact quantification of the 11 material issues allowed the Chroma ESG Working Team to make visual representations of impact prioritization after a thorough consideration of the management team's recommendations:



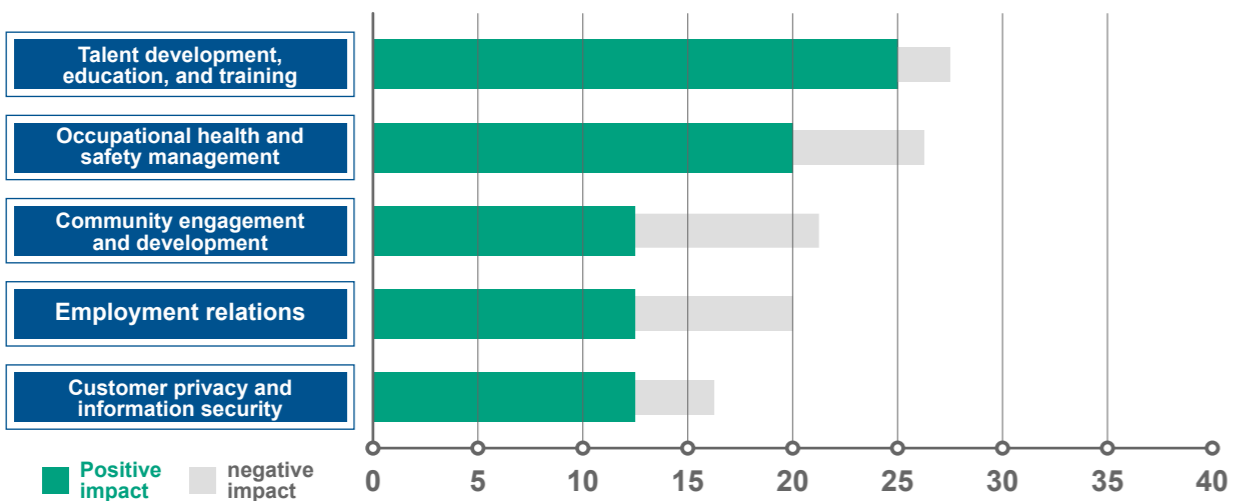
Environmental impact prioritization



Corporate governance impact prioritization



Social (or human rights) impact prioritization



Eleven material issues were identified by Chroma in 2022. A comparison with the issues of 2021 show the environmental aspect, the “green products and services” (hazardous substance management) to be a new item. The development of green energy products has now become a prime Chroma mission. From a social aspect, the “customer privacy and information security” is also a new item. Furthermore, changes in work habit during the pandemic caused information security to become much more significant. Although “sustainable development strategy” has not been included in the governance aspect, this does not mean it is less important to Chroma. Sustainable development strategy has actually become vitally important to our DNA and is fully integrated with company operational strategy. The meanings of these material issues to the Company are as follows:

Aspect	Material topic	Meaning for Chroma
<p>Environmental (E)</p>	Waste management	We periodically follow up and report the weight of waste, set reduction targets, and publicize the resource recycling achieved by our plant and the energy conservation goals for our facilities.
	Climate change and energy management	The reduction of GHG emissions is a vital necessity for global environmental protection. Chroma uses an inventory, quantification, monitoring, and reporting to control and reduce our GHG emissions. We have made a conscious effort to reduce resource and energy consumption in our operating processes to save energy conservation and to cherish our planet. Energy and resource management is a strategy that powers sustainable operations, while systemic management facilitates energy conservation to improve environmental performance.
	Green products and services (management of hazardous substances)	Chroma is committed to the development of green energy products and the reduction of hazardous substances in relevant processes by creating lead-free production lines.
<p>Social (S)</p>	Employment	Employees are our most important partners and great emphasis has been placed on their work environment, its development, and health care. We have established diverse internal communications channels and carried out various employee relationship projects to create optimal employee workplaces. diverse internal communications channels and carried out various employee relationship projects to create optimal employee workplaces.
	Occupational health and safety management.	Chroma has maintained safe and healthy workplaces and has formulated an employee health management plan which provides front line protection for our employees.
	Talent development, education and training	With the long-term development of talented persons as an ultimate goal, we cultivate talent in new employees from scratch. Chroma has an excellent supporting mechanism and cultivation plan that accelerates the growth of talented vision and ability.
	Community engagement development	Chroma has always been actively involved in social care and charity. We also collaborate with academia to nurture promising talent and boost our domestic research capability. The Company will continue to give back to society with more concrete action, not only to facilitate sustainable development, but also to create more exposure for the Chroma brand.



**Corporate governance (G)**

<b>Customer privacy and information security</b>	As a leading developer and supplier of precision monitoring and measurement equipment, we are committed to further technological development of an information security framework and close collaboration with key partners to protect the security of our important information assets and customer data. We have obtained ISO 27001 information security management certification in the face of increasingly severe information security threats and have realized process improvement through the plan-do-check-act (PDCA) cycle.
<b>Business ethics and ethical management</b>	Chroma manages the business based on its stable operation and the principles of integrity and honesty, builds up a thorough corporate governance structure and carries out relevant tasks to protect the rights and interests of stakeholders.
<b>Economic performance</b>	The Company is committed to maintaining a stable financial performance for all the stakeholders.
<b>Supplier management</b>	Suppliers are important partners for sustainable growth, and we manage the supply chain in a sustainable way that reduces operational risks and costs. This is the only way we can continue to provide our customers with responsible and quality services.

Scope of Material Issues

● Direct impact
■ Contributing impact
◆ Business relationship

**Environmental aspects**

<b>Material topic</b>	Climate change and energy management.	Green products and services. (hazardous substance management)	Waste management.
<b>List of material topics</b>	GRI 302 Energy, GRI 305 Emissions.	*	GRI-306 Waste.
<b>Chapter for reference</b>	4.1.1 Energy management. 4.4.2 GHG management.	4.2 Green sustainable design.	4.4.3 Waste Management.

Level of involvement and scope of impact

Investor	●	■	●
Competent authorities	●	■	●
Customer	●	●	●
Suppliers	■	■	●
Competent authorities	■	■	■
Employee	●	●	●

● Direct impact ■ Contributing impact ◆ Business relationship

**Social**

<b>Material topic</b>	Occupational health and safety management.	Talent development, education and training.	Employment	Community engagement development.	Customer privacy and information security.
<b>List of material topics</b>	GRI 403 Occupational Health and Safety.	GRI-404 Training and Education.	GRI 202 Market presence. GRI 401 Employment. GRI-405 Diversity and Equal Opportunities.	*	GRI 418 Customer privacy.
<b>Chapter for reference</b>	5.5 Occupational safety and health.	5.3.1. Employee Education and Training.	5.1.1 The Status of Staff Employment. 5.2.1 Employee Remuneration.	6. Community Engagement.	2.4 Information security management.

Level of involvement and scope of impact

Investor	■	■	●	●	●
Competent authorities	●	■	●	●	●
Customer	●	■	■	●	●
Suppliers	■	■	■	■	●
Competent authorities	●	●	■	●	●
Employee	●	●	●	●	●

● Direct impact ■ Contributing impact ◆ Business relationship

**Corporate governance**

<b>Material topic</b>	Business ethics and ethical management.	Economic performance.	Supplier management.
<b>List of material topics</b>	GRI-205 Anti-corruption.	GRI-201 Economic Performance.	GRI 204 Procurement Practices. GRI 308 Supplier Environmental Assessment. GRI 414 Supplier social assessment.
<b>Chapter for reference</b>	2.3.1 Ethical corporate management.	2.1 Status of operations.	3.4 Sustainable supply chain.

Level of involvement and scope of impact

Investor	●	●	●
Competent authorities	■	■	●
Customer	●	●	●
Suppliers	●	◆	●
Competent authorities	●	●	●
Employee	●	●	■

Management Approach of Material Issue

Aspect	Environmental aspects		
Material topic	Climate change and energy management.	Green products and services (hazardous substance management)	Waste management.
Management Mechanism	GHG emissions in the base year were re-calculated according to the ISO 14064-1:2018 standard and further energy conservation measures were developed according to the quantitative inventory results.	Demonstrate the outcome of technology innovation on outstanding performance and the function of new products and implement green design at all stages of the product life cycle to reduce environmental impact and realize responsible production and consumption.	We abide by all local environmental regulations by sorting, waste and carbon reduction, and pollution prevention, to ensure full compliance with the requirements of the waste management regulations. We also reduce waste production through active sales, reuse, and the paid disposal of scrap.
Commitments and Policies	Office Net Zero 2030 Company Net Zero 2050 carbon reduction targets for hotspots based on the inventory results.	Develop low carbon products through green design. We have assumed responsibility for the cherishment of our planet and in doing so continue to provide total solutions for electrical energy and have become an excellent business, shared and prided upon, by our customers, employees, shareholders, and suppliers.	Environmental policy and commitment to the environmental management system. Facilitate energy conservation through systemic management to improve environmental performance, make continual improvement, and prevent pollution.
The mechanism and Outcome of Assessment in 2022	After Chroma's first TCFD Report was published in 2022, we set targets and formulated countermeasures and counteractions. We will systemically disclose the achievements and progress of these counteractions. KPI setting and monthly review. Reduce carbon emissions by 3,891t CO2e over the base year.	*	Receive third-party (SGS) verification and carry out periodic audits of the ISO 14001 management system and disclose environmental performance each year and progress of these counteractions. 0 leakage, environmental violation and fine in 2022.
Medium-term and Long-term Goals	Net Zero 2050 Target. (Base Year: 2021)	We continuously develop different types of technologies that can fulfill customer need and reduce energy consumption at the same time. An example of this is energy recovery technology for electrical and electronic equipment. Energy dissipated in the form of heat is feedback into the grid as electrical energy to significantly reduce total energy consumption.	Continue to maintain a zero-non-compliance record.
Resources/ Actions/ Grievance Mechanisms	*	R&D	Safety and Health Center.

Aspect	Social		
Material topic	Occupational health and safety management.	Talent development, education and training.	Employment
Management Mechanism	The ISO 45001 Occupational Health and Safety (OH&S) Management System was implemented and an Occupational Safety and Health Committee was established to review and coordinate all OH&S-related matters.	A Talent Quality-Management System (TTQS) was implemented in coordination with the existing well-established education and training development system and e-learning platform.	Remuneration and benefits are managed according to corporate/personal annual target achievements, the remuneration policy, and internal/external salary assessments.
Commitments and Policies	Continuous improvement in the workplace environment and full compliance with the occupational safety and health requirements helps to prevent industrial accidents and lowers the occupational safety risk. ISO 45001 Occupational health and safety management system.	TTQS was set as a benchmark for training quality and has also been combined with corporate vision, goals, and strategies to build a training system for multidimensional development to enhance workforce quality and competitiveness. Procedures for Education and Training Management, Regulations for Internal Instructor Development and Appointment, and linking performance with a reward system.	Glory sharing allows all employees to share the fruit of business operational performance that results from the efforts of all employees. Remuneration policies.
The mechanism and Outcome of Assessment in 2022	Periodic external verification. Occupational accident rate in 2022: 0.27%. Workplace monitoring non-compliance in 2022: 0.	Internal audit. Average hours of training per employee in 2022: 10.34 hrs.	Internal audit. Average range of salary increases in 2022: 8.82%.
Medium-term and Long-term Goals	Zero severe accidents. Zero fines.	Continuous professional and multifaceted education and training enhances workforce quality and corporate competitiveness. Digital transformation courses (classroom) account for over 50% of all courses.	The remuneration system was optimized to uphold the principle of "same pay for the same job and pay by competence". Review the level of various salary items periodically and provide employees with encouraging salary rewards.
Resources/ Actions/ Grievance Mechanisms	Labor-management meeting Occupational Safety and Health Committee meeting.	Labor-management meeting. Employee complaint mailbox.	Labor-management meeting. Employee complaint mailbox.

Aspect	Social	
Material topic	Community engagement development.	Customer privacy and information security.
Management Mechanism	Engage in various social welfare activities based on a strategy of integrating core business competency with social welfare.	Implement customer document management in compliance with the Information Processing and Customer Data Protection SOP, Code of Business Conduct and Ethics, Regulations for Management of Technical Documents.
Commitments and Policies	Popularize science education and climate action and actively develop talent.	Protect internal and external information and establish customer trust. Information Processing and Customer Data Protection SOP, Code of Business Conduct and Ethics.
The mechanism and Outcome of Assessment in 2022	1 Collaborations with Academia (1) Supported Formula Student Taiwan (FST) to promote student formula engineering design competition safety. (2) Sponsored student formula teams. (3) Premier University Plan (4) Chroma Elite Scholarship (5) Industrial Technology Graduate Programs. (6) The 1st Chroma Precision Machinery and Measurement Technology Paper Award. 2. Social welfare and engagement (1) Fun & Love with the Chroma Charitable Donation Campaign. (2) Taiwan Railways of Popular Science. (3) Supported the "Coastal Clean-up" held by Business Today. (4) Chroma Breach Cleanup Round 2. (5) Charitable Donations	Internal audit. No customer privacy violation was reported in 2022.
Medium-term and Long-term Goals	*	Continuously improve the data protection mechanism and enhance data security awareness in employees. Maintain zero customer privacy violations.
Resources/ Actions/ Grievance Mechanisms	*	Customer service mailbox. ESG complaint box.

Aspect	Corporate governance		
Material topic	Business ethics and ethical management.	Economic performance.	Supplier management.
Management Mechanism	Implement the Code of Business Conduct and Ethics, establish a culture of ethical corporate management, and optimize corporate sustainable development. Develop preventive measures such as setting up an unethical behavior report mailbox and the establishment of reward and discipline systems.	Establish complete strategies and management actions to improve operational performance and to achieve steady sustainable corporate growth.	1. Define and manage environmental controlled substances in the company in accordance with the regulations for the "Standards for Controlling Hazardous Chemical Substances in Materials and Products". 2. Include corporate sustainability management in new supplier evaluation in accordance with the "Regulations for Management of Suppliers", that cover environmental, occupational safety and health, CSR, and hazardous substances management".
Commitments and Policies	Establish a culture of ethical corporate management and provide customers with the best-quality products and services. Code of Business . Conduct and Ethics.	Provide a better welfare system to repay stakeholders and ensure labor retirement benefits the best-quality products and services. Policy: Labor policy · remuneration policy	Request suppliers to sign the "Statement of Environmental Protection" and the "Statement of SVHC Substance-Free and Conflict-Metal-Free" to ensure continuous legal compliance of mass production.
The mechanism and Outcome of Assessment in 2022	Periodic external audit 0 corruption and bribery case was reported in 2022.	CPA audit and certification. 2022 revenues: NT\$22,067,242 thousand.	Ensure high-efficiency and versatility of the supply chain by maintaining local Taiwan procurement of more than 85%.
Medium-term and Long-term Goals	Continue to make integrity and probity the core values of our corporate culture, and ensure that all employees and officers engage in business activities that are based on business integrity and ethics. Continue to uphold Zero bribery and corruption as ultimate goals.	Enhance corporate governance and increase revenues and profit.	Ensure the inclusion of sustainability in the procurement process and assume responsibility for the social, economic, and environmental impact resulting from procurement. Seek more sustainable procurement methods in a review of demand taking cost and efficiency of the life cycle into consideration. Establish transparent, fair, and honest procurement principles and prohibit unethical behavior. Comply with the law, international codes of conduct, and international human rights policies, and ensure that suppliers do the same.
Resources/ Actions/ Grievance Mechanisms	Unethical behavior report mailbox.	Finance Department or ESG complaint box.	Procurement.





### 1.3 Practice of the UN SDGs

In 2015 the United Nations passed 17 Sustainable Development Goals with 169 targets that are all critical to global sustainable development. In addition to helping assess the alignment of product development with global need, the SDGs also urge us to think about how the influence of our business missions can be maximized to improve environmental protection, energy conservation, protection of the planet and the discovery of opportunities from within. After discussions about the company's core professional competencies, and with reference to the analysis of international benchmarked and successful customer cases, the ESG Committee concluded that future sustainable development should be focused in five key directions.

Chroma's annual performance in response to the "UN Sustainable Development Goals (SDGs)"

SDGs	Our actions in response to the SDGs	Corresponding chapter
<p>Ensure healthy lives and promote well-being for everyone at all ages.</p> <p>3.3 End the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases by 2030.</p> <p>3.6 Halve the number of global deaths and injuries from road traffic accidents by 2020</p> <p>3.8 Achieve universal health coverage (UHC), including financial risk protection, access to quality essential health-care services and to safe, effective, quality, and affordable essential medicines and vaccines for all.</p>	<p>1. Provide regular health check-ups.</p> <p>2. Organize health seminars.</p> <p>3. Provide onsite medical service.</p>	<p>5.5.6 Multifaceted health management</p>
<p>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.</p> <p>4.4 Substantially increase the number of youths and adults who have relevant skills by 2030, including technical and vocational skills, for employment, decent jobs and entrepreneurship.</p>	<p>1. Ensure that the employees at all levels receive all the necessary training.</p> <p>2. Provide internship opportunities for industry-academia cooperation.</p>	<p>5.3 Talent development, education and training</p>
<p>Achieve gender equality and empower all women and girls</p> <p>5.1 End all forms of discrimination against women and girls everywhere.</p> <p>5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of women and girls at all levels</p>	<p>1. Publish a Human Rights Policy</p> <p>2. Continue the promotion and education of existing employees and new employees in a "commitment to human rights".</p>	<p>1.1 Sustainable development visions and strategies</p>

<p>Promote inclusive and sustainable economic growth, full and productive employment, and decent work for all.</p> <p>8.5 Achieve full and productive employment and decent work for all women and men by 2030. This must include young people and persons with disabilities, with equal pay for work of equal value.</p> <p>8.8 Protect labor rights and promote a safe and secure working environment for all employees, including migrant workers, in particular women migrants, and those in precarious employment.</p>	<p>1. Establish an Occupational Safety and Health Committee to build a safe and healthy work environment.</p> <p>2. Ensure full compliance with all the regulations regarding labor, health and safety, environment, and business ethics.</p>	<p>5.5 Occupational safety and health</p>
<p>Ensure sustainable consumption and production patterns</p> <p>12.5 Make a substantial reduction to waste generation by prevention, recycling and reuse by 2030.</p>	<p>Demonstrate the outcome of technology innovation for outstanding performance and function in new products and implement green design at all stages of product life cycle to reduce environmental impact and realize responsible production and consumption.</p>	<p>4.2 Green sustainable design</p>
<p>Take urgent action to combat climate change and its impact</p> <p>13.2 Integrate climate change measures into national policies, strategies and planning.</p> <p>13.3 Improve education, and raise awareness of human and institutional capacity for the mitigation of climate change, adaptation, the reduction of impact and early warning.</p>	<p>The results of the GHG inventory show that our primary source of GHG emissions comes from externally purchased power needed for the operations. We have therefore chosen energy conservation as our priority for carbon reduction.</p>	<p>4.3 Climate change risks and opportunities</p>
<p>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p> <p>16.5 Substantially reduce corruption and bribery in all their forms.</p>	<p>Chroma prioritizes integrity as the most important core value for employee conduct and this has been so since the company's inception. Chroma has established and published several relevant internal regulations, including "Ethical Management Best Practices", "Chroma Rules on Ethical Management Best Practice", "Ethical Code of Conduct" etc.</p>	<p>2.3.1 Ethical corporate management</p>



**Sustainability  
Governance**



Chroma's vision is to develop globally leading products as a world-class enterprise. To achieve this, Chroma devotes a significant amount of investment and resources in research and development in order to produce exceptional products of precision, reliability, and valuable unique test solutions for technology industries. To prevail as a world-class enterprise, Chroma nurtures its brand as one of innovation, continuous improvement, and globalization to ensure its industry-leading technology and integration capabilities.

Aspect	Corporate governance (G)		
Material topic	Business ethics, ethical corporate management, economic performance, customer privacy, and information security		
Management Mechanism	<ol style="list-style-type: none"> <li>1. Implement a Code of Business Conduct and Ethics, establish a corporate culture of ethical corporate management, and optimize corporate sustainable development.</li> <li>2. Develop preventive measures such as setting up a Whistle-blowing email address and establishing reward and discipline systems.</li> <li>3. Establish complete management strategy to improve operational performance and achieve steady sustainable corporate growth.</li> <li>4. Obtain ISO 27001 information security management certification and realize process improvement through the plan-do-check-act (PDCA) cycle.</li> </ol>		
Commitments and Policies	<ol style="list-style-type: none"> <li>1. Establish a culture of ethical corporate management and provide customers with the best-quality products and services.</li> <li>2. Code of Business Conduct and Ethics</li> <li>3. Provide a better welfare system to repay stakeholders and ensure labor retirement benefits.</li> </ol>		
Mechanism and Outcome of Assessment in 2022	<table border="0"> <tr> <td style="vertical-align: top;"> <ol style="list-style-type: none"> <li>1. Internal audit.</li> <li>2. CPA audit and certification.</li> <li>3. Information security incidents or complaints</li> </ol> </td> <td style="vertical-align: top;"> <ol style="list-style-type: none"> <li>1. There were no reports of unethical business activity including corruption and bribery in 2022.</li> <li>2. 2022 operating revenues: NTD\$22,067,242 thousand, up by 25% over 2021.</li> <li>3. There were no reports of any harmful information security incidents, no Chroma-proven external complaints, nor any complaints from the supervisory authorities in 2022.</li> </ol> </td> </tr> </table>	<ol style="list-style-type: none"> <li>1. Internal audit.</li> <li>2. CPA audit and certification.</li> <li>3. Information security incidents or complaints</li> </ol>	<ol style="list-style-type: none"> <li>1. There were no reports of unethical business activity including corruption and bribery in 2022.</li> <li>2. 2022 operating revenues: NTD\$22,067,242 thousand, up by 25% over 2021.</li> <li>3. There were no reports of any harmful information security incidents, no Chroma-proven external complaints, nor any complaints from the supervisory authorities in 2022.</li> </ol>
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Medium-term and Long-term Goals	<ol style="list-style-type: none"> <li>1. Continue to make integrity and probity the core values of our corporate culture, and ensure that all employees and officers engage in business activities based on business integrity and ethical behavior.</li> <li>2. Continue to uphold zero unethical behavior and zero corruption as ultimate goals.</li> <li>3. Enhance corporate governance and increase revenue and profit.</li> <li>4. One female director will be elected in 2023 to achieve board diversity.</li> <li>5. Raise the level of information security defense by the improvement of five technological aspects: identification, protection, detection, response, and recovery, together with various information security management solutions and processes.</li> </ol>		
Resources/Actions/Grievance Mechanisms	Whistle-blower email, Financial Department or ESG complaint mailbox, Information Security Management Office		



2.1

Status of operations GRI 2-1

1. About Chroma

Company Name	Chroma ATE Inc.	
Date of Establishment	1984/11/08	Stock Code 2360
Operations HQ	No. 88, Wenmao Road, Guishan Dist, Taoyuan City, Taiwan	
Major production bases	<ul style="list-style-type: none"> <li>Taoyuan Plant   No. 68, Huaya 1st Rd, Guishan Dist, Taoyuan City</li> <li>Hsinchu Plant   Hsinchu Plant: 6th Floor, No. 5, Keji Road, Science Industrial Park, Hsinchu City</li> <li>Kaohsiung Plant   Kaohsiung Plant: No. 1, Beineihuang East Road, Nanzi Dist, Kaohsiung City</li> </ul>	
Number of employees	We have a total of 1,964 employees on our payroll; 1,519 male (equivalent to 77.34%) and 445 female (22.66%)	
		<p>female: 445 equivalent to 22.66% <b>22.66 %</b></p> <p>male : 1,519 equivalent to 77.34% <b>77.34 %</b></p>
Industry type	Electrical and Electronic Equipment	
Listed time	December 12, 1996	
Paid-in Capital	NT 4,253,970 thousand	Operating revenues
		NT 22,067,242 thousand
Main Products	We and our subsidiaries engage in the design, assembly, manufacture, trading, maintenance and repair, calibration, and distribution of software and hardware for computers and peripherals, automated testing systems, precision testing and measurement instruments, signal generators, power supply units, and telecommunication power supply equipment, as well as the trading of special materials and the design, manufacture and installation of automation equipment.	
Corporate website	www.chromaate.com	

Chroma was established in 1984 and is a world-leading supplier of Chroma branded precision electronic testing and measurement instruments, automated testing systems, intelligent manufacturing systems, and comprehensive testing and automated turnkey solutions. The primary fields of application of Chroma products include electric vehicles, green batteries, LEDs, solar power, semiconductors/ICs, photonics, flat panel displays, video and color, power electronics, passive components, electrical safety, thermoelectric temperature control, automated optical inspection, smart manufacturing systems, clean technology, and smart factories. We invest heavily in R&D resources every year to maintain our leadership in key technologies and highly integrated capabilities in the optical, mechanical, electronic, temperature control and software fields to retain our competitive advantages and achieve sustainable business operation.

Chroma has branch offices in Europe, the United States, Japan, Korea, China, and Southeast Asia chartered to deliver innovative technologies with high value-added service to satisfy our global customers' demands.

At Chroma,

we believe in the truth of measurements and the trust of partnerships.

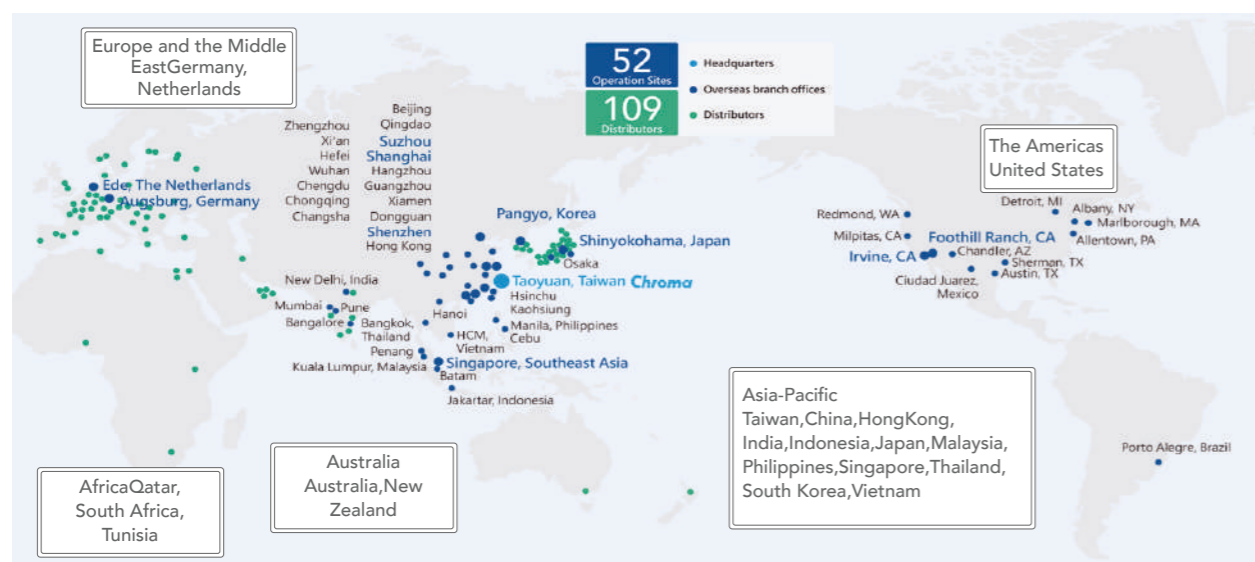
Using the most advanced solutions, we test and measure the quality of clients' products with the ambition of making them better, more effective, and ultimately thriving in the marketplace.

By delivering truth in constructive, open, and trusted partnerships, we enable the development of innovative products for the betterment of society and the world.

Chroma

Advancing Excellence

### Globalization Strategy



### Economic Performance GRI 201-1

The 2022 operating revenues increased by 25% over 2021 to NT\$22,067,242 thousand, a new historical high. It is likely that the strong demand for electric car applications shown in 2022 will continue in 2023 and soaring revenues are expected.

Chroma complies with International Financial Reporting Standards (IFRS). The relevant statistics from the Chroma consolidated financial reports for the last three years are provided in the table below. To access our CPA audited financial and annual reports, please visit the Market Observation Post System operated by TWSE at <https://emops.twse.com.tw/>. Although the financial statements of subsidiaries have been combined with Chroma's, they are not included within the report boundaries.

### Financial data for the last 3 years

Unit: NTD thousand

Item \ Year	2020	2021	2022
Operating revenues	15,532,543	17,584,023	22,067,242
Operating costs	7,988,328	9,133,871	10,710,148
Operating expenses	4,746,819	5,375,160	6,317,899
Net profit	2,797,401	3,074,993	5,039,256
Consolidated net income attributed to stockholders of the Company	2,323,776	4,179,232	5,105,824
EPS (NT dollar)	5.56	9.96	12.14

### Key financial ratio for the last 3 years (Consolidated Financial Statement Analysis-IFRS)

Item \ Year	2020	2021	2022	
Capital structure analysis	Debt ratio (%)	41.74	35.87	35.34
	Long-term funds fixed assets ratio (%)	624.21	355.40	349.73
Liquidity analysis	Current ratio (%)	160.57	186.87	191.39
	Quick ratio (%)	122.28	133.86	137.28
Profitability analysis	Return on total assets (%)	8.85	14.62	16.25
	Return on equity (%)	15.21	24.17	25.61
	Net profit margin (%)	14.96	23.77	23.14

Chroma and its subsidiaries engage in the design, assembly, manufacture, trading, maintenance and repair, calibration, and distribution of software and hardware for computers and peripherals, automated testing systems, precision testing and measurement instruments, signal generators, power supply units, and telecommunication power supply equipment, as well as the trading of special materials and the design, manufacture and installation of automation equipment. The product lineups and their proportion of sales in the last two years are as follows:

Main Products	2021			2022		
	Number (Note 1)	Ratio of Revenue (%)	Revenue (in NTD thousand)	Number (Note 1)	Ratio of Revenue (%)	Revenue (in NTD thousand)
1.Measurement instruments	233,596	77.09	13,555,365	944,938	91.85	20,269,180
2.Special materials	--	15.95	2,804,306	--	2.88	635,186
3.Automated equipment	101	4.44	780,206	244	3.76	829,479
4.Others	--	2.52	441,146	--	1.51	333,397
<b>Total</b>	<b>233,697</b>	<b>17,584,023</b>	<b>945,182</b>	<b>22,067,242</b>		

Note 1: (Including the units of kilometers, meters, feet, kilograms and sets): We and our subsidiaries have adopted the "high-mix low-volume" manufacturing strategy rather than mass production which involves automated production lines. Therefore, the production volume could not be stated in a single unit.

Note 2: The Chroma New Material Corporation terminated operations on March 31, 2022.

Chroma started business operations with display testing, with a vision to develop precise, reliable, and unique testing instrumentation. We have gradually diversified the scope of our services to nine major testing product groups which cover electricity, electronics, passive components, semiconductors, IC design, and others. While Chroma is committed to becoming a global business, we have not lost sight of the impact of global warming and actively support various green and environmental protection measures in our R&D, manufacture, product content and services. In addition to reducing equipment energy consumption, we also actively develop equipment to fulfill the green product demand of customers. We use an energy-recycling feature to convert and recycle energy dissipated from traditional equipment in the form of heat, as electrical energy for reuse in the grid to significantly reduce energy consumption. Additionally, we continuously enhance the accuracy and speed of our testing equipment, reduce product size and weight, and use innovative features to help users enhance production efficiency. All these actions demonstrate our efforts to address global warming threats as a corporate world citizen.

Innovative technology plays a crucial role in the design of energy-efficient testing equipment. Each year we prepare a technology development roadmap based on the direction of operations. Our R&D projects are based on the principle of no repeated investment in the same technology and we coordinate all R&D units to the innovation or improvement in the performance of different technologies. Additionally, the Advanced Technology Research Center focuses on the research of core, and forward-looking technologies, to make early preparation for the requirements of new products that the Company will launch over the next 2 to 5 years. We are enhancing the rate of green equipment coverage based on a principle of the maximization of labor use.

According to EU Taxonomy, EU taxonomy-eligible revenue of Chroma HQ was NT\$5,630,644 thousand. This accounts for 41.8% of the total revenue of \$13,461,000 thousand. The Revenues from electric vehicle applications account for 26.3% of total revenue, which can be classified under "manufacture of low carbon technologies for transport" (power systems), "manufacture of batteries" (power batteries), and "infrastructure enabling low-carbon road transport" (electric vehicle supply equipment).The revenue from manufacture of energy efficiency equipment for buildings for factory and process efficiency enhancement accounted for 10.5%, including information system manufacture, automated production lines, and testing equipment for semiconductors, optical components, and displays.

EU Taxonomy	2022 EU Taxonomy-eligible Revenues (NTD thousand)	As a Percentage of Total Revenues (%)	Total
Manufacture of renewable energy technologies	102,482	0.8%	<p><b>41.8%</b> <b>5,630,644</b> (thousand)</p>
Manufacture of low carbon technologies for transport	1,586,877	11.8%	
Infrastructure enabling low-carbon road transport	233,278	1.7%	
Manufacture of batteries	1,719,661	12.8%	
Storage of electricity	204,119	1.5%	
Transmission and distribution of electricity	174,959	1.3%	
Manufacture of equipment for the production and use of hydrogen	0	0.0%	
Manufacture of energy efficiency equipment for buildings	1,419,730	10.5%	
Manufacture of other low carbon technologies	189,539	1.4%	
<b>Total</b>	<b>5,630,644</b>	<b>41.8%</b>	

In response to the international trend towards tax governance, in a proactive, responsible, and innovative spirit and with a corporate philosophy of the pursuit of better technology, quality, and service, we are committed to sustainable development, information transparency, legal tax compliance, CSR fulfillment, and the payment of reasonable tax in local countries.

**Chroma Tax Policy**

<b>Legal Compliance</b>	<ul style="list-style-type: none"> <li>Honest reporting and the payment of tax by the due date in accordance with international tax standards and the tax regulations in local countries.</li> <li>Consideration of the diction and reason for the law (ratio legis) and the interpretation of tax laws and regulations without the intentional transfer of profit to countries with lower tax rates.</li> </ul>
<b>Arm's Length Principle</b>	<ul style="list-style-type: none"> <li>Abide by the OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations and the transfer pricing regulations of local countries in related party trading, as well as the obligation to pay tax and duty in the region where value was created.</li> </ul>
<b>Commercial Substance</b>	<ul style="list-style-type: none"> <li>No tax avoidance without real operations and no use of tax havens for tax avoidance.</li> </ul>
<b>Risk Control</b>	<ul style="list-style-type: none"> <li>Consider the Company's optimal tax administration as well as the impact on reputation and sustainable value in different countries under global operations. Careful review of the tax risks and countermeasures when material transactions are conducted or significant decisions are made..</li> </ul>
<b>Information Transparency</b>	<ul style="list-style-type: none"> <li>Appropriate disclosure of tax information to stakeholders at regular intervals through open channels, such as financial reports, annual reports, CSR reports etc, to ensure information transparency.</li> </ul>
<b>Integral Communication</b>	<ul style="list-style-type: none"> <li>Develop mutual trust, mutual respect, and honest communication for contact with the tax authorities of the operational locations, hold timely discussions to clarify uncertainties in tax affairs, and maintain a harmonious and sound relationship.</li> </ul>
<b>Talent cultivation</b>	<ul style="list-style-type: none"> <li>Enrich the professional knowledge of tax administration units through continuous education and training to improve their capability in handling various tax issues and to conduct relevant affairs with an integral and steady attitude for effective tax risk management.</li> </ul>



At Chroma, the highest decision-making body for tax risk management. The Board approves the tax governance policy to ensure the effective operation of the tax management mechanism based on overall operational strategy and the macro environment.

The Accounting Department is responsible for all tax administration matters. Important tax issues are referred to management for approval to ensure proper implementation of tax governance. External tax consultants are engaged, or special hires are made when necessary, to handle important or complex tax risks and uncertainties.

The Board has commissioned an Audit Committee to supervise the quality and integrity of Company accounting, auditing, the financial reporting process, and financial control practices. An internal auditor periodically reports various results, including tax matters, of audits conducted in compliance with the annual audit procedure.

Unit: NTD thousand

	2021	2022
<b>Income from external customers</b>	<b>17,584,023</b>	<b>22,067,242</b>
Taiwan	6,893,918	5,166,873
China	5,784,661	9,665,802
The Americas	2,848,020	5,072,458
Others	2,057,424	2,162,109

Unit: NTD thousand

	2021	2022
<b>Current income tax liabilities</b>	<b>405,049</b>	<b>697,668</b>
Taiwan	369,443	533,053
China	19,582	92,908
The Americas	415	30,173
Others	15,609	42,344

	2021	2022
<b>Number of employees in the Group</b>	<b>3,170</b>	<b>3,379</b>
Taiwan	2,189	2,286
China	598	689
The Americas	196	209
Others	187	195

Unit: NTD thousand

	2021	2022
<b>Net profit before tax</b>	<b>5,283,846</b>	<b>6,441,468</b>
<b>Income tax expense</b>	<b>978,531</b>	<b>1,219,910</b>
<b>Effective tax rate</b>	<b>19%</b>	<b>19%</b>
<b>Income tax paid</b>	<b>815,995</b>	<b>678,258</b>
<b>Cash effective tax rate</b>	<b>15%</b>	<b>11%</b>

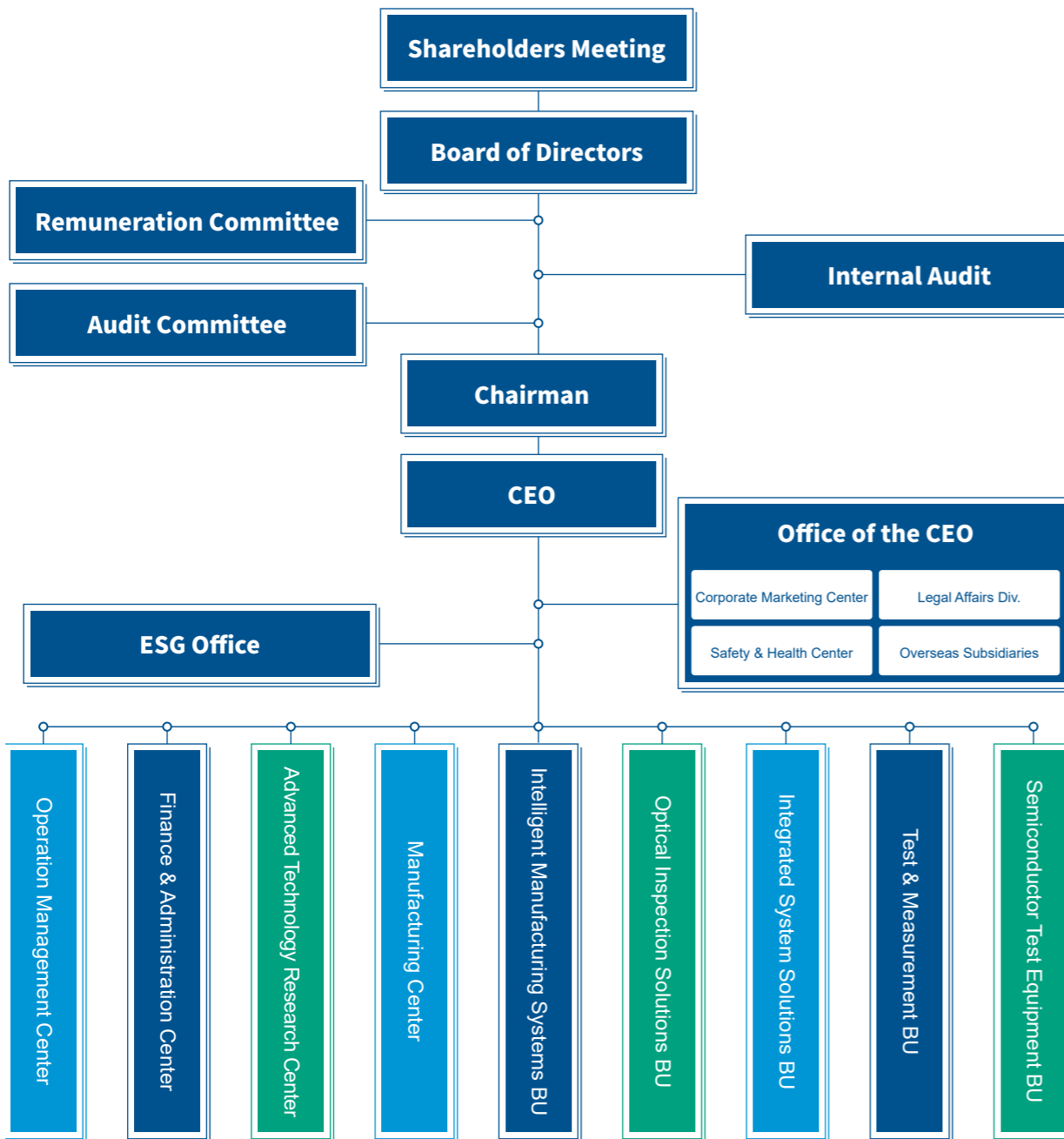
The effective tax rate for both 2021 and 2022 was 19%, which is similar to the statutory business income tax rate at 20% of the Republic of China, Chroma's principal location of operations. We are committed to innovation and R&D and the R&D and manufacturing centers are both located at Chroma HQ in Taiwan. We actively increase equipment and re-investment costs and the average cash tax rate is 15% and 11% because the company invests in research and development expenses and obtains credit for real investment as well as undistributed surplus tax deduction.



2.2 Corporate governance

2.2.1 Company organizational structure GRI 2-9

The shareholder's meeting is the highest body of authority at Chroma, and the Board of Directors, led by the Chairman, assumes responsibility for implementation and supervision of the various operations of the Company. In an effort to improve overall operational efficacy and decision-making power of the Chroma Group, the Chairman also serves as the CEO of Chroma. All senior executives are hired locally to enhance Board independence.



Responsibilities of the Main Divisions

Division	Scope of business
<b>CEO Office</b>	<ol style="list-style-type: none"> <li>1. Corporate Marketing Department, Legal Affairs Department, and Safety and Health Center all fall directly under the office of the CEO.</li> <li>2. Management of company-wide administrative affairs: setting of targets; communication and coordination; planning of products; planning of new business development; patent management; review of contracts; environmental protection; and occupational safety and health management.</li> </ol>
<b>ESG Office</b>	<ol style="list-style-type: none"> <li>1. Establish, implement, and promote ESG strategies.</li> <li>2. Assist with the communication of key ESG performance to stakeholders.</li> </ol>
<b>Internal Auditor</b>	<ol style="list-style-type: none"> <li>1. Establishment, revision and review of the internal audit and control systems.</li> <li>2. Approval, review, and auditing of the internal control systems</li> </ol>
<b>Semiconductor Test Equipment BU</b>	<ol style="list-style-type: none"> <li>1. Planning, R&amp;D, and marketing of semiconductor test equipment.</li> </ol>
<b>Test &amp; Measurement BU</b>	<ol style="list-style-type: none"> <li>1. R&amp;D and marketing of measurement instruments.</li> <li>2. Calibration of instruments and operation of calibration laboratories.</li> </ol>
<b>Integrated System Solution BU</b>	<ol style="list-style-type: none"> <li>1. R&amp;D of automated mechatronic systems used for measurement.</li> <li>2. Planning, R&amp;D, and marketing of modular instruments. Planning, R&amp;D, and marketing of system integration.</li> </ol>
<b>Intelligent Manufacturing System BU</b>	<ol style="list-style-type: none"> <li>1. R&amp;D and marketing of MES systems.</li> </ol>
<b>Optical Inspection Solutions BU</b>	<ol style="list-style-type: none"> <li>1. R&amp;D and marketing of optical inspection systems.</li> </ol>
<b>Manufacturing Center</b>	<ol style="list-style-type: none"> <li>1. Procurement and production of raw materials for Company products.</li> <li>2. Planning and maintenance of product quality systems.</li> </ol>
<b>Advanced Technology Research Center</b>	<ol style="list-style-type: none"> <li>1. Planning and development of new technologies to help business units understand the future development of new industries.</li> </ol>
<b>Finance &amp; Administration Center</b>	<p>The Finance, Accounting, and Human Resources Divisions, General Affairs and Factory Affairs Departments are all under control of the Finance &amp; Administration Center.</p> <ol style="list-style-type: none"> <li>1. Finance Division: Planning and use of Company funds; investment planning and assessment; stock affairs.</li> <li>2. Accounting Division: Establishment and implementation of accounting systems; handling various taxation and accounting affairs.</li> <li>3. Human Resources Division: Overall planning of Company human resources; organizational development; training.</li> <li>4. General Affairs Division: Procurement of general supplies; management of Company equipment and fixed assets.</li> <li>5. Factory Affairs Division: Maintenance and safety of factories.</li> </ol>
<b>Operations Management Center</b>	<p>Establishment and management of our operations management systems. The IT Division includes the System Development, System Maintenance, System Management, and Data Control Sections: Design, safety control, and publication and management of internal regulations with respect to Company IT equipment and application systems.</p>

**2.2.2 Board operation (improving director competency) GRI 2-10,GRI 2-12,GRI 2-13**

The shareholder's meeting is the highest body of authority at Chroma, and the Board of Directors, led by the Chairman, assumes responsibility for implementation and supervision of the various operations of the Company. In an effort to improve overall operational efficacy and decision-making power of the Chroma Group, the Chairman also serves as the CEO of Chroma. Three of the seven Chroma board seats have been reserved for independent directors to enhance Board independence. The chairman maintains sufficient communication with other members of the Board to ensure proper governance and operation.

In 2022, the Board of Directors held 7 meetings and was responsible for the review and supervision of decisions relating to material topics such as the economic, social, environmental, and other matters that created maximum value for shareholders. Directors are expected to take the initiative in discussions about agendas where their individual interests or the interests of the organizations they represent are involved, by making a declaration to refrain from taking part in discussions, or voting, if such involvement could potentially harm Company interests. In such cases voting by proxy on behalf of other directors is also not allowed.

The list of members on the Board of Directors is as shown below:

Name	Title	Gender	Main background and experience
Leo Huang	Chairman (also an employee of the Company)	Male	Bachelor of Electronics Engineering, National Chiao Tung University CEO, Ko Mao Corp
I-Shih Tseng	Director	Male	PhD in Mechanical Engineering, Pennsylvania State University Project Manager, Institute for Information Industry
Tsun-I Wang	Director	Male	PhD in Optoelectronic Engineering, National Chiao Tung University Vice President, Tailyn Technologies, Inc Vice President, Hua Wei Photoelectric Co
Chung Ju Chang	Director	Male	PhD in Electrical Engineering, National Taiwan University Lifetime Chair Professor, Department of Electrical and Computer Engineering, National Chiao Tung University. Director, Ting Hsun Telecommunications Development Culture and Education Foundation Director, National Information Infrastructure Enterprise Promotion Association Chair Professor, Department of Electrical and Computer Engineering, National Chiao Tung University R&D Director, National Chiao Tung University Dean of Department of Communication Engineering, National Chiao Tung University Technical Review Member, Ministry of Economic Affairs leading programs/industrial technology projects Science and Technology Advisor, Ministry of Education Science and Technology Advisor, Ministry of Transportation and Communications
George Chen	Director	Male	PhD in Atmospheric Sciences, State University of New York, USA Chairperson, Chinese Culture University Emeritus/Distinguished Chair Professor, National Taiwan University Distinguished Chair Professor, National Taiwan University Vice President for Academic Affairs of National Taiwan University Professor, Department of Atmospheric Sciences, National Taiwan University

Jia-Ruey Duann	Independent Director	Male	PhD Physics North Dakota State University Harvard Business School Advanced Management Program Distinguished Specialist, Industrial Technology Research Institute (ITRI) Assistant Vice President, Industrial Technology Research Institute CEO, Tainan Branch, Industrial Technology Research Institute CEO, Taichung Branch, Industrial Technology Research Institute Director, Center for Measurement Standards, Industrial Technology Research Institute. Chief and Assistant Director, Center for Measurement Standards, ITRI Adjunct Associate Professor, Department of Physics, Chung Yuan University Chairman, Automatic Optical Inspection Equipment Association (AOIEA) Assistant Researcher/ Optical Factory Chief, Taiwan Instrument Research Institute (TIRI)
Steven Wu	Independent Director	Male	MBA, George Washington University Vice President, Private Equity Business Department, CDIB Capital Group Director and President, CDIB International Corporation Senior VP, Kai-Fa Technology Consulting Corporation Senior VP, WI Harper Group AM, Investment Business Department, Central Investment Holdings Co Ltd. Junior Manager, Investment Review Section, KMT Investee Management Committee Senior Consultant, Corporate Finance Consulting Department, Deloitte Taiwan Investment Manager, Pacific Capital (Holdings) Ltd.

Note 1: For more detailed information, please refer to the 2022 Annual Report.

**Board Independence and Diversity.**

In 2022 all seven members of the Board were ROC (Taiwan) nationals, including three independent directors, accounting for 43%. The term of office of all members is under six years. Currently, there are no female board members. In 2023, we will increase the proportion of female members. The age distribution of all members is 50 years and above. In addition to years of practical experience in business operations, each director has capabilities that include business judgment, crisis handling, industrial knowledge, international perspective, leadership, and decision-making.

We have written statements of independence from the independent directors in accordance with the regulations governing public companies to ensure qualification, their own independence and the independence of their lineal relatives from the company, as well as compliance with the Securities and Exchange Act.

**Remuneration policy for directors and senior executives GRI 2-19**

**1.Directors:**

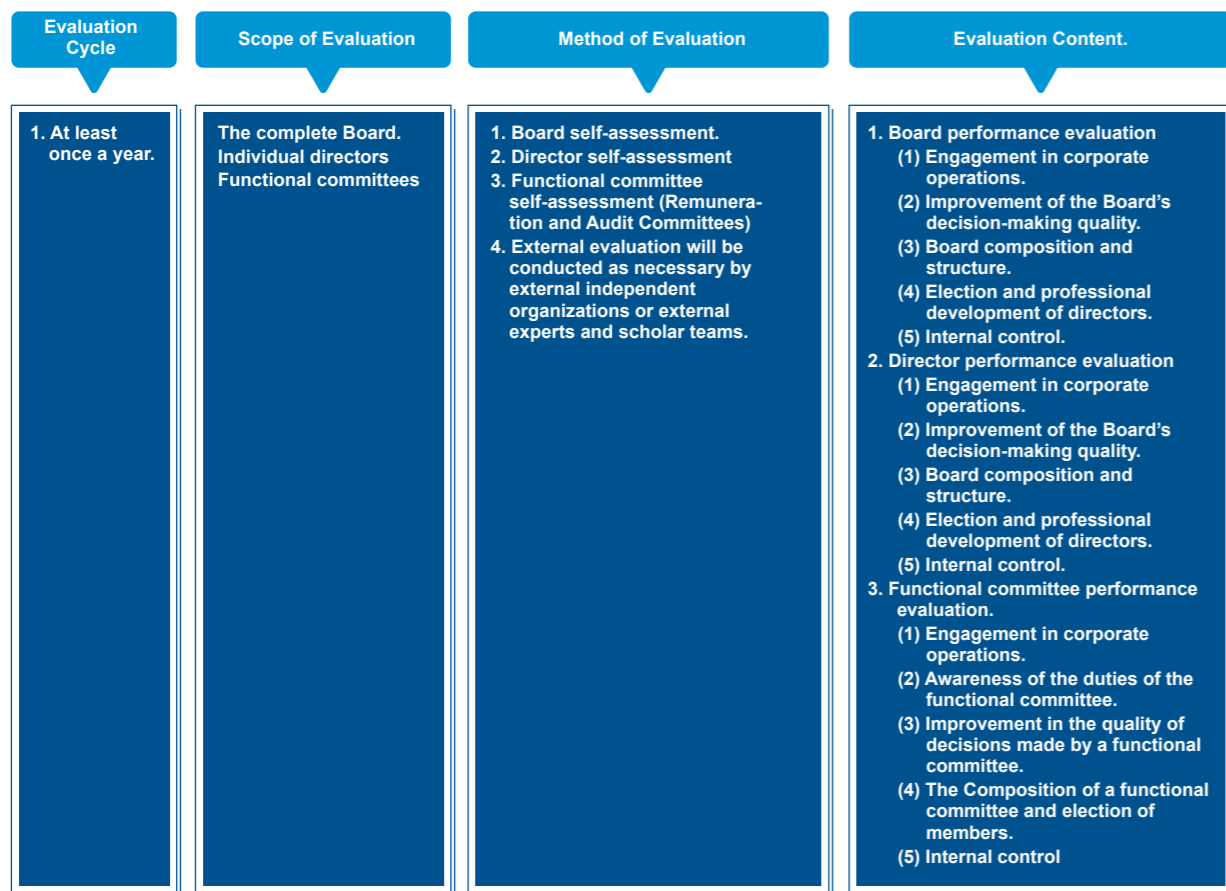
In accordance with Article 34 of the Articles of Incorporation, not more than 1.5% of the pre-tax profit, before deduction of employee and director remuneration, should be appropriated for remuneration of the directors. In our director remuneration policy, in addition to Company overall operational performance and future operational risks and development trends of the industry, we also consider individuals director's contribution to Company operational performance to decide reasonable remuneration. Remuneration for directors is reviewed and approved by the Remuneration Committee and the Board. The remuneration policy reviews are based on the actual status of operations to ensure optimal balance between sustainable management and risk control.

**2.senior executives:**

Chroma has established the "Remuneration Management Procedure for Senior Managers", which states that the Company shall refer to the salary standard of competitors in the industry during the appointment of officers to determine remuneration in the form of a fixed monthly salary. Any change in remuneration for officers shall be handled as an employee salary, which will depend on the company operational performance for the year as well as personal performance. A salary adjustment proposal shall be submitted to the Remuneration Committee for review and be approved by the Board of Directors.

Board performance evaluation GRI 2-18

We have established the "Regulations for Board Performance Evaluation" to properly implement corporate governance and enhance the efficiency of Board operation. Accordingly, performance evaluation is carried out annually by the Board and the related functional committees. Evaluation covers engagement in corporate operations, election and the professional development of directors as well as internal control. In the future, board performance evaluation will be carried out externally to ensure a more objective angle.



1.Board operation self-assessment

The assessment included a total of 45 indicators, and the results show that the overall operation was excellent.

Self-Assessment Aspect	Evaluation Item	Score in 2021	Score in 2022
A. Engagement in corporate operations	12 items	4.98 points	4.86 points
B. Improvement of the Board's decision-making quality	12 items	4.95 points	4.95 points
C. Board composition and structure	7 items	4.92 points	5 points
D. Election and professional development of directors	7 items	4.92 points	5 points
E. Internal control	7 items	4.92 points	5 points

2.Director performance self-assessment

The assessment included a total of 23 indicators. The average score of each director participating in the self-assessment was calculated. The results show that the overall operation was excellent.

Self-Assessment Aspect	Evaluation Item	Score in 2021	Score in 2022
A. Alignment with the corporate goals and missions	3 items	5 points	5 points
B. Awareness of directorial duties	3 items	5 points	5 points
C. Engagement in corporate operations	8 items	5 points	4.97 points
D. Development and communication in internal relationships	3 items	4.90 points	4.90 points
E. The expertise and continuous professional development of directors	3 items	5 points	5 points
F. Internal control	3 items	4.95 points	5 points

3. Functional committee self-assessment (Remuneration and Audit Committees)

(1) Performance self-assessment of the Remuneration Committee

The assessment included a total of 20 indicators, and the results show that the overall operation was excellent.

Self-Assessment Aspect	Evaluation Item	Score in 2021	Score in 2022
A. Engagement in corporate operations	4 items	5 points	5 points
B. Awareness of duty in Remuneration Committee members	4 items	5 points	5 points
C. Improvement of decision-making quality in the Remuneration Committee	7 items	5 points	5 points
D. Composition and member selection of the Remuneration Committee	3 items	5 points	5 points
E. Internal control	2 items	5 points	5 points

## (2) Performance self-assessment of the Audit Committee

The assessment included a total of 21 indicators, and the results show that the overall operation was excellent.

Self-Assessment Aspect	Evaluation Item	Score in 2021	Score in 2022
A. Engagement in corporate operations	4 items	5 points	5 points
B. Awareness of duty in Audit Committee Members	4 items	4.92 points	4.92 points
C. Improvement of decision-making quality in the Audit Committee	7 items	5 points	5 points
D. Composition and selection of Audit Committee members	3 items	5 points	5 points
E. Internal control	3 items	5 points	5 points

### ■ Continuing education of directors GRI 2-17

In accordance with the requirements for Continuing Education of Directors and Supervisors in TWSE Listed and TPEX Listed Companies, new directors must receive at least 12 hours of continuous education in their first year and at least 6 hours of continuous education each year onwards.

In 2022, the total director training time was 49 hours, with an average of 7 hours for each person. This is more than the statutory 6 hours. In the future, we will arrange multifaceted external continuing education courses to improve the expertise of directors. This will help them to exercise due care and diligence as good administrators, decision-makers, leaders, and supervisors of the highest Company governance body.

Title	Name	Date of Continuing Education	Organizer	Name of course	Hours of Continuing Training
Director	Leo Huang	2022.06.22	Taiwan Academy of Banking and Finance	Corporate Governance and Corporate Sustainable Operations Training Course—19th Session	3
		2022.07.20	Taiwan Stock Exchange and Taipei Exchange	Sustainable Development Roadmap: Sector Topic Outreach	2
		2022.10.25	Taiwan Academy of Banking and Finance	Corporate Governance Lecture	3
Director	I-Shih Tseng	2022.10.26	Accounting Research and Development Foundation	A Practical Insight into the Common Problems in Financial Statement	6
Director	Tsun-I Wang	2022.12.29	Accounting Research and Development Foundation	Trends of Internet Technology Development and New Thoughts for Internal Auditors Regulations	6

Director	Chung-Ju Chang	2022.04.22	Taiwan Institute for Sustainable Energy	Taishin 30 Sustainable Net Zero Summit and Forum: Transformation to Net Zero 2030	3
		2022.10.25	Taiwan Academy of Banking and Finance	Corporate Governance Lecture	3
Independent Director	Jia-Ruey Duann	2022.04.22	Taiwan Institute for Sustainable Energy	Taishin 30 Sustainable Net Zero Summit and Forum: Transformation to Net Zero 2030	3
		2022.10.14	Securities and Futures Institute	Insider Trading Prevention Outreach 2022	3
Independent Director	George Chen	2022.04.22	Taiwan Institute for Sustainable Energy	Taishin 30 Sustainable Net Zero Summit and Forum: Transformation to Net Zero 2030	3
		2022.07.20	Taiwan Stock Exchange and Taipei Exchange	Sustainable Development Roadmap: Sector Topic Outreach	2
		2022.08.05	Securities and Futures Institute	Climate Change and Net Zero Policy for Business Operations: Risks and Opportunities	3
		2022.10.19	Securities and Futures Institute	Legal Compliance for Insider Share Transfer Outreach 2022	3
Independent Director	Steven Wu	2022.06.22	Taiwan Academy of Banking and Finance	Corporate Governance and Corporate Sustainable Operations Training Course (19th Session)	3
		2022.10.25	Taiwan Academy of Banking and Finance	Corporate Governance Lecture	3

### 2.2.3 Membership associations GRI 2-28

Chroma is a member of various associations and organizations. In addition to this, members of Chroma staff have been the chairperson, director, and officers of some associations and have served on their committees. These include the Taiwan Battery Association, SEMI, AOIEA, and some others. Through participating in these associations and organizations, apart from sharing our experience and establish partnership with other companies in the industry, we also learn the latest technology from market trends of other industries to enrich our R&D capacity. Additionally, we also actively participate in the exhibitions and forums held by these associations and organizations and advance various policies and initiatives to the industry, hoping to contribute to the overall industry and so to enhance industry sustainability.

Organizations which have Chroma as a Member in 2022	Extent of Participation
Taiwan Electrical and Electronic Manufacturers' Association (TEEMA)	Member
Taiwan Battery Association (TBA)	Chairman Leo Huang is an executive director of the 8th board of directors (06/2020-06/2022) and the chair of the Standards Setting Committee
Semiconductor Equipment and Materials International (SEMI Taiwan).	Chairman Leo Huang is the chair of the SEMI Testing & Metrology Committee The president of the Semiconductor Test Equipment BU is a member of the SEMI Packaging Test Committee. The VP of the Semiconductor Test Equipment BU is member of the SEMI Test Committee. The VP of the Measurement Instrument BU is a member of the SEMI Energy Storage Committee.
Automatic Optical Inspection Equipment Association (AOIEA)	Chairman Leo Huang is deputy chair of the 8th and 9th board of directors.
Taiwan Thermal Management Association	Member
Photonics Industry & Technology Development Association (PIDA)	Member
Taiwan Society for Precision Engineering (TSPE)	The President of the Integrated System Solution BU is an executive director of the 3rd board of directors.
Taiwan Compound Semiconductor Alliance	Member
The International Commission on Illumination - Taiwan (CIE)	Member
Taiwan Electronic Equipment Industry Association (TEEIA)	The Biomedical Instrument Development Center is a member of the Smart Healthcare Committee.
Food Industry Intelligent Automation	Member
Taiwan Motor Industry Association (TIMA)	Member
Taiwan Medical and Biotech Industry Association	Member
Taiwan Light Metals Association	Member

Taoyuan City Industrial Association

Member

Institute for Biotechnology and Medicine Industry

Member

Taiwan Net Zero Emissions Association

Member

LIB Academia-Industry Alliance

Member



## 2.3

### Ethical corporate management and legal compliance

#### 2.3.1 Ethical corporate management GRI 2-16, GRI 205-2, GRI 205-3

Ethical transaction is a long-standing Chroma business philosophy. We uphold integrity in all business activities and allow no corruption and unethical behavior in any form. Chroma prioritizes integrity as the most important core value for employee conduct and this has been so since the company's inception. Chroma has established and published several relevant internal regulations, including "Ethical Management Best Practices", "Chroma Rules on Ethical Management Best Practice", "Ethical Code of Conduct" etc. Our "Employee Reward and Censure Procedure" serves as a basis for the reward or censure of employee conduct and work performance. Guidelines have been established to define the details of relevant disciplinary action for violation and the handling of personal grievances. In addition, a whistle-blowing email (audit@chroma.com.tw) and hotline (03-327-9999 Ext. 88301) are also featured on our website as channels for both internal and external personnel complaints. The responsible units take immediate action to deal with complaints as soon as they are submitted. Employees are requested to abide by all relevant laws and regulations and internal regulations. The extensive publicity of the value of integrity and probity ensures the optimization of a sound corporate culture. We ask all our employees, by extensive and firm promotion of desirable values such as loyalty and integrity, to foster our corporate culture by observance of all the pertinent Company internal rules and regulations.

In addition to conveying the importance of integrity, we have also established processes designed to prevent acts of dishonesty in the "Chroma Rules on Ethical Management". Moreover, we also ask collaborating partners to sign a "Letter of Undertaking of Integrity", which clearly states that the undersigned party pledges to refrain from transactions that would be deemed inappropriate or unethical in all business activities and that Chroma may immediately terminate all business dealings with an undersigned party in the event of a violation. Terms on integrity and ethical practices have also been included in the Chroma standard Sales and Purchase contracts to deter any acts of dishonesty. There were no incidents of unethical conduct or corruption in 2022 and all employees acted according to the pertinent regulations on ethical conduct and stayed true to the Chroma ethical management philosophy. A total of 6 sessions with 178 new joiners were held in 2022.

#### 2.3.2 Legal compliance GRI 2-27

Absolute legal compliance in operations is crucial to the practice of corporate social responsibility and one of the keys to sustainable operations. We distribute products and render services worldwide. To ensure compliance with the relevant laws and regulations around the world, we have established the Legal Affairs Division to keep close track on law making and developments that may affect our operations. We have also established a mechanism to assess the fairness of legislation, policies, and regulations to ensure all units remain in full legal compliance. We identify, manage, and monitor laws and regulations in relation to operations, environmental protection, occupational safety and health, labor, and products. We uphold the principle of disclosure in the CSR reports of material legal incidents resulting in monetary and non-monetary sanctions or which affect corporate operations, we maintain properly balanced reporting and information transparency.

No sanction for non-compliance with any laws and regulations was reported in 2022.



## 2.4 Information security management GRI 418-1

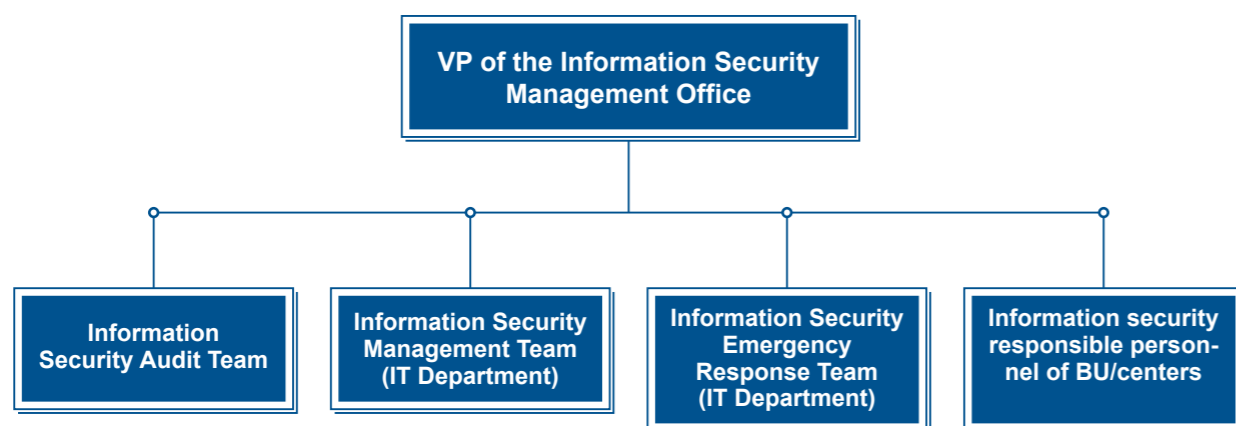
We are one of the leading developers and suppliers of precision monitoring and measurement equipment and are fully committed to the further development of the information security framework through technology development and close collaboration with key partners. This is essential for the protection of the security of our important information assets and customer data. In the face of increasingly severe information security threats, we have obtained ISO 27001 information security management system certification in January 2022 to ensure process improvement through the plan-do-check-act (PDCA) cycle.

### 2.4.1 Information security management framework

We have established an Information Security Management Office to plan and implement information security policies and have assigned resources for the planning and monitoring of an information security system and its management. The Information Security Management Office has been set up by the Security Audit, Security Management, and the Information Security Emergency Response Teams, and information security management is carried out in each business unit.

The Information Security Management Office manages and promotes all the various matters related to information security. The office holds at least one management meeting each year to review the status of improvement of issues found in previous audits, to study the internal and external issues in relation to the information security management system, and to implement them in the management system. The performance of information security management in 2022 was as follows:

- One server room infrastructure and redundancy drill, including information and communication infrastructure.
- The annual business continuity plan (BCP) drill, covering 15 items, was carried out. This included the redundancy function and backup mechanism of the major information system server(s) as a routine operation.
- Backup data restoration was verified 58 times to ensure the availability of backup data.
- Scanning for internal and external system vulnerabilities was done twice and two social engineering drills were also carried out.
- Six sessions (28 hours) of information security education and training were carried out for information employees and one (2 hour) session was carried out for general employees on the need for information security. A test of information security awareness was also done to improve response and raise the alertness of employees to information security risks.
- There was no report by any units of harmful security incident or external complaint or complaint from the supervisory authorities about information security operations in any Chroma unit in 2022.



### 2.4.2 Information security management action

Based on the information security implementation model, actual information security management actions are as follows:

#### 1. Network security:

Introduction of advanced detection technology to monitor the information network, block malicious cyberattacks, gather intelligence on information security threats, and prevent the spread of computer viruses.

#### 2. Device security:

(1) Optimize end-point antivirus and virus scan mechanisms to prevent ransomware and malware.

(2) Enhance the detection of malware, Trojan attachments, and phishing mails in the email system.

(3) Detect suspicious networking behavior and block malicious and high-risk websites, links or file downloads.

#### 3. Application security:

Set security check and assessment standards and improvement targets in the application development process. Continuously enhance the security control mechanisms and patch potential application loopholes.

#### 4. Data protection:

Establish a user password management mechanism, network security area quarantine and maintain access control and data security.

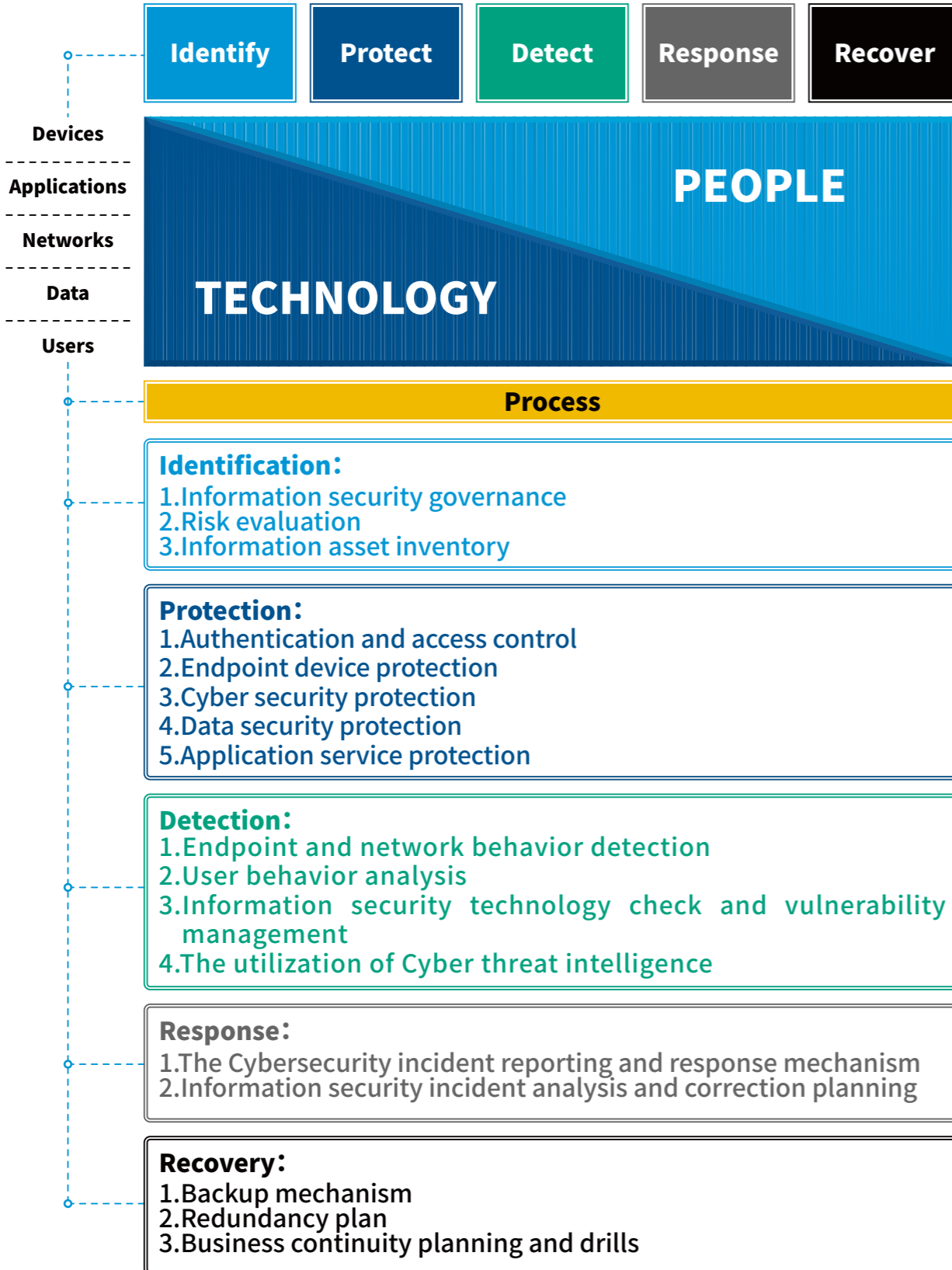
#### 5. Personnel account management, education and training

Set password principles and requirements and ensure regular password changes. Arrange education, training, and tests, to determine the awareness of information security in employees.

#### 6. Information security incident performance:

The ubiquitous monitoring and collection of security protection operation records, the gathering and analysis of information security intelligence, and the establishment of procedures for reporting and handling information security incidents.

The aim of information security management is the development of a set of assessment criteria to continuously raise the level of information security defense. Three important elements are involved: personnel, technology, and process as well as five important security management technology aspects: identification, protection, detection, response, and recovery. These and other information security plans, processes as well as the maturity of information security, encompass the life cycle of cyber security risk management.



ESG



**Customer Service and  
Supplier Management**



We have formed most important strategic partnerships with our customers. In addition to offering them valued products and services, we also concern ourselves with social and environmental values. We are a world class enterprise that has a corporate mission “to develop globally leading products for a sustainable supply chain”. We collaborate with the supply chain and share social and environmental responsibilities with them.

Aspect	Corporate governance (G)
Material topic	Supply chain management
Management Mechanism	<ol style="list-style-type: none"> <li>The Company defines and manages environmentally controlled substances in accordance with the “Standards for Controlling Hazardous Chemicals in Materials and Products”.</li> <li>New supplier evaluation is done in accordance with the “Regulations for Management of Suppliers”, including corporate sustainability, environmental and occupational safety and health, CSR, and the management of hazardous substances.</li> </ol>
Commitments and Policies	<ol style="list-style-type: none"> <li>Suppliers are required to sign the “Statement of Environmental Protection” and the “Statement of SVHC Substance-Free and Conflict Metal-Free” to ensure continuous legal compliance of these aspects for mass production.</li> <li>We maintain a corporate mission “to develop globally leading products as a world-class enterprise” for a sustainable supply chain and share social and environmental responsibilities with them.</li> </ol>
Mechanism and Outcome of Assessment in 2022	<p>Mechanism and Outcome of Assessment in 2022</p> <ol style="list-style-type: none"> <li>Named as one of the Top 40 Best Taiwan Global Brands in 2022.</li> <li>Received the “Featured Green Tech Company” Award at the EE Awards Asia 2022.</li> <li>Won Taiwan Excellence Awards in 2022.</li> <li>Awarded the Taipei AMPA ESG Achievement Green Label.</li> <li>Made application for 125 domestic and international patents in 2022, including 92 invention and 33 utility model patents.</li> <li>Overall customer satisfaction in 2022 was “satisfactory”, with an average score of 4.35 points, 0.04 more than in 2021.</li> <li>We maintain a highly-efficient and versatile supply chain in Taiwan with local procurement of more than 85%.</li> </ol>
Medium- and Long-Term Goals	<ol style="list-style-type: none"> <li>Incorporate sustainability into the procurement process and assume responsibility for the social, economic, and environmental impacts caused by procurement.</li> <li>Review procurement demand and consider the cost and efficiency of the life cycle to seek more sustainable procurement methods. Establish transparent, fair, and honest procurement principles and prohibit unethical behavior.</li> <li>Comply with the law, international codes of conduct, and international human rights policy, and ensure suppliers do the same.</li> </ol>
Resources/Actions/Grievance Mechanisms	R&D, Procurement, Market Planning



### 3.1 Innovative products and technologies

We offer our testing equipment to upstream and downstream suppliers to ensure the function and quality of renewable products, improve performance, reduce carbon emissions and facilitate the development and success of a renewable industry. In recent years we have developed several energy-efficient products, such as the Regenerative Battery Pack Test System Model 17040 and the Regenerative Grid Simulator Model 61815, which can regenerate energy with an efficiency of up to 90%. These energy regeneration technologies are used across our product range. Many of our products now include an Energy Saving Mode. Earlier testing equipment consumed energy while it was on, even though there was no output. Equipment with the saving mode will enter a standby state with lower energy consumption after it has not been used for some time. This effectively reduces energy consumption and the waste of resources.



### Chroma 17040E Regenerative Battery Pack Test Systems Models

Models 17020/17040 of the Chroma Regenerative Battery Pack Test System discharge electricity from battery packs and then feed it back to the grid. This solves the problems of wasted discharge energy and manages the ambient heat generated by traditional equipment.

The regeneration efficiency of Chroma 17020 is up to 85%.

The regeneration efficiency of Chroma 17040 is up to 90%.



### 61815 Regenerative Grid Simulator

The Chroma 61815 Regenerative Grid Simulator has an energy regeneration function in which energy generated from the device under test is fed back to the grid to achieve environmental protection and energy conservation. The regeneration efficiency can be up to 90%. This regenerative grid simulator is suitable for use on PV inverters, energy storage systems (ESS), power conditioning systems (PCS), microgrids, power hardware-in-the-loop (PHIL), electric vehicle supply equipment (EVSE), on board chargers (OBC), bi-directional on-board chargers, and others.



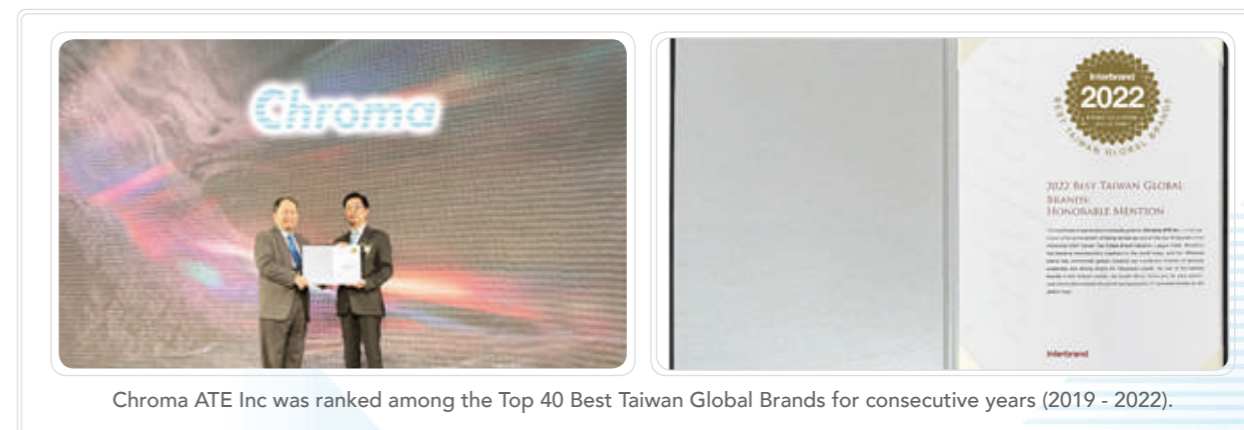
## 3.2

### Product quality and responsibility increases brand value.

We sell our products worldwide under our original brand name "Chroma" and introduce new technologies to offer measurement and comprehensive intelligent automation test solutions to ensure the performance, quality and success of our customers' products. We emphasize innovation and energy conservation, and the way we combine product sales and corporate sustainable development is unique to our products. We continue to engage in product R&D and technology innovation in the face of global climate and environmental changes to provide higher-performance and reliable energy conservation solutions for future generations and to build sustainable low-carbon cities.

### Named as one of Taiwan's Top 40 Best Global Brands in 2022

Chroma has been ranked among the Top 40 Best Taiwan Global Brands from (2019 to 2022), and our brand value has increased by 19% during 2021. This Ranking was done as part of the "Brand Value Survey for Taiwan Global Brands" conducted by the Industrial Development Bureau, MOEA, and the global brand value consultancy, Interbrand. The professional brand evaluation model of the Best Global Brands for quantitative financial analysis and qualitative brand management analysis was used in the survey. This allows Taiwanese enterprises to determine their own brand values and position and association on the global market as an indicator of brand value growth.



Chroma ATE Inc was ranked among the Top 40 Best Taiwan Global Brands for consecutive years (2019 - 2022).

### Awarded the Featured Green Tech Company Award at EE Award Asia 2022

We won the EE Award Asia for two consecutive years (2021 - 2022). This year we received the Featured Green Tech Company Award co-organized by EE Times and EDN. There were more than 400 nominations from a total of 137 businesses around the globe. The EE Awards Asia commend businesses with outstanding field influence and benchmark potential.



Chroma won the EE Award Asia for two consecutive years (2021 - 2022).

**Won the 2022 Taiwan Excellence Awards.**

The Taiwan Excellence Award from the Bureau of Foreign Trade, Ministry of Economic Affairs, is granted for strictly selected products of "Innovative Value" made in Taiwan, in four categories: "R&D", "Design", "Quality", and "Marketing".

Two Chroma products received awards

The Programmable DC Power Supply (Chroma 62000D)

The Chroma 71803-3 2D Color Analyzer



The Chroma 62000D (left) and Chroma 71803-3 (right) won the Taiwan Excellence Award.

**Awarded the Taipei AMPA ESG Achievement Green Label.**

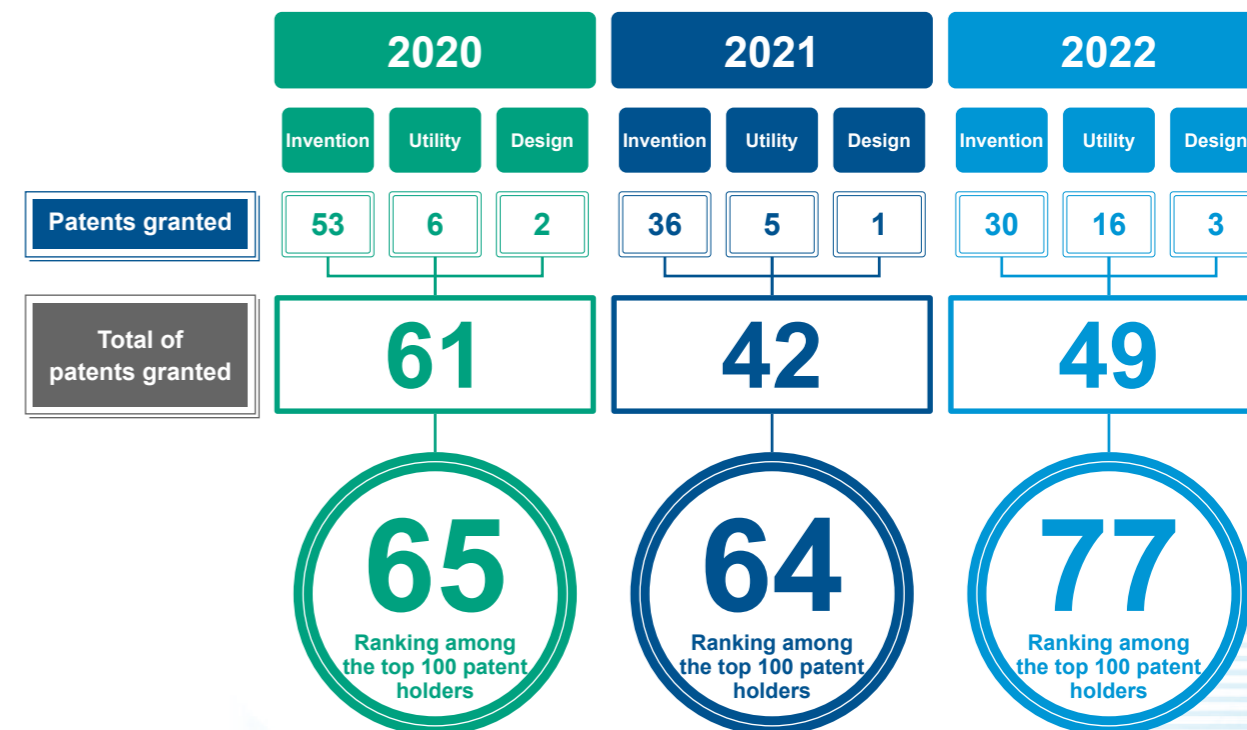
Chroma was the first company to receive the Taipei AMPA ESG Label after it was launched in 2022. Award-winning manufacturers are commended for their ESG engagement in sustainable development and recognition by the AMPA ESG for the use of renewables or recycled materials as well as for social welfare and the promotion of a friendly workplace environment.



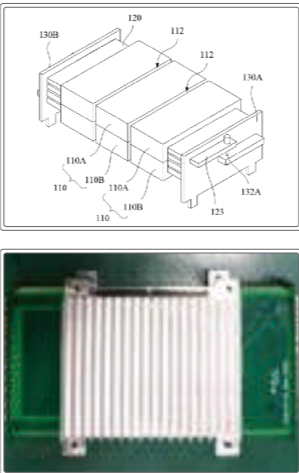

Awarded the AMPA ESG Achievement label at the first launch of the award.

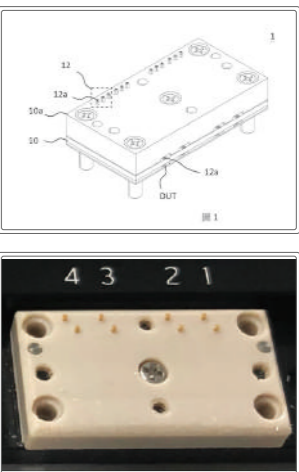
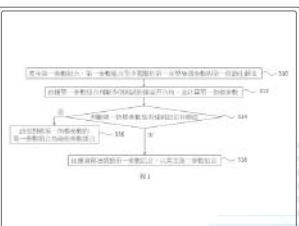
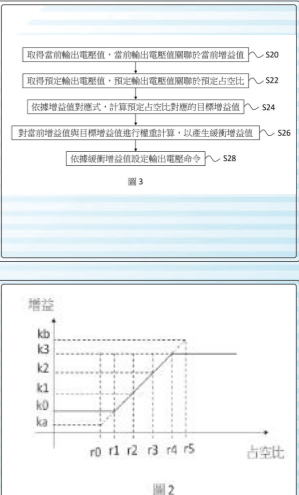
**Innovative technologies and patents**

The combined efforts of nearly 700 R&D personnel in innovative technologies resulted in applications for 125 domestic and international patents in 2022. This included 92 patents for inventions and 33 new model patents. Many patents were granted in Taiwan, China, and the USA. The annual increase in the number of patents demonstrates our efforts and achievements in technological innovation and emphasis on intellectual property (IP) rights. The patents granted during 2020-2022 included:



Examples of design of patented green products

Number of authorized announcements	Title of patent	Patent Description and Green Design Aspects	Drawings and photos
CN112863826B	The Planar Transformer	<p>This transformer is the core component of a power supply unit and plays an essential role in energy conversion. The special design of the coils on the PCB, of the planar transformer effectively reduces many of the adverse effects of high-frequency operation to lower energy consumption, and it also reduces the size of the transformer at the same time. This design can also lower the transformer's thermal resistance, which enhances cooling efficiency and lowers energy consumption by the cooling fan. Overall, this special patented design lowers energy consumption of both the PSU itself and its cooling fan with significant enhancement of energy conservation and carbon reduction.</p>	
TWI787026	Testing machine control methods and systems.	<p>To use the testing system it is necessary to have licensed privilege control of the software. In the past, the necessary license data was burned into a PCI card which linked the computer to the testing machine. However, burning errors often caused failure, and it was necessary to replace the PCI cards which could not be reused. Now the privilege control data is burned into a hardware lock, which is a small RoHS-compliant part, and this makes replacement easy. Should the testing machine be transferred to another site there is no need to worry about privilege control. These hardware locks are also reprogrammable for reuse with other testing machines. They are eco-friendly and their use reduces the waste of electronic components.</p>	

TWI762134	Surge Protection Module	<p>Traditional electronic circuit structure surge protection modules need to meet certain conditions: the electronic parts of the control circuit, the normally open (NO) or closed (NC) paths required to maintain protection, the energy consumed in the operation process, etc., all need consideration. Careful design and structure of the mechanism to maintain the normal state can effectively reduce the number of electronic parts as well as the energy used. The design offers important energy-saving characteristics especially for equipment that is used for extended times such as in high-temperature burn-in test applications.</p>	
TWI753554	Method for automatic adjustment of electronic devices	<p>In this method, a set of parameters are assigned to the imaging process. After data has been collected, repeated iterations of the genetic and Newton-Raphson algorithms are used until the optimal parameter is found by convergence. This effectively reduces the staff's workload, enhances the product machine tuning efficiency and accuracy while also improving yield rate and reducing waste.</p>	
TWI783340	Voltage Control Method	<p>This patented method uses a digital control strategy to achieve the dynamic adjustment of output voltage, duty ratio, and circuit feedback gain to adjust system control bandwidth. It significantly maximizes the value of the lowest output voltage to maintain system stability and response speed. This method of digital control can reduce the number of parts, system complexity, and hardware cost. It reduces the amount of circuit hardware and enhances reliability and product competitiveness while also achieving energy conservation and carbon reduction.</p>	



### 3.3 Sales and customer service

Chroma has branch offices in Europe, the United States, Japan, South Korea, China, and Southeast Asia and more than 52 sales locations and 109 distributors in five continents around the globe. These are chartered to provide customers with high added value and services as well as to meet the demand for innovative technology. We have multifaceted and transparent communication channels for business inquiries, product sales, installation, training, after-sales service, technical support and equipment calibration. There are also physical channels such as Chroma Day, exhibitions, seminars and forums, newspapers and magazines, business visits, and others. The digital channels include the corporate website, corporate APP, online exhibitions (Virtual Chroma), webinars, social media, a video platform, online customer service, and email. These channels together address and properly handle all customer feedback and quality issues in real time. Chroma uses systemic management to optimize the procurement process for customers that covers marketing, sales, pre-sales, and after-sales service.

Customer feedback is important nutrient for us and we use every item that comes back to us to develop and optimize customer relationships. We use spontaneous business visits, periodic internal quality and review meetings, and a comprehensive annual customer satisfaction survey to discern the needs and opinions of customers which are then analyzed and reviewed to facilitate future improvement.

The Market Planning Center conducts customer satisfaction surveys of products, marketing activity, sales personnel, and after-sales service in four different languages: Traditional and Simplified Chinese, English, and Japanese. The results of our 2022 customer satisfaction survey were "satisfactory", with an average score of 4.35 points, which is 0.04 points higher than in 2021. The highest score went to sales personnel and suggested that customers are satisfied with our products and services. We plan to build more e-service platforms to speed up our customer services. Responsible salespersons periodically follow up and make changes to satisfy all the improvement suggestions made by customers. Excellent Chroma performance over the years has enabled us to establish a good customer interaction and cooperation model. Practical feedback from customers is an important driving force for product and service improvement. Naturally our ultimate goal is to surpass customer expectations.

	2018	2019	2020	2021	2022
1. Product Quality	4.36	4.30	4.31	4.33	4.35
2. Marketing activities	4.02	3.94	4.40	4.47	4.49
3. Sales personnel	4.49	4.42	4.31	4.40	4.42
4. After-sales service	4.37	4.33	4.00	4.06	4.12
Overall satisfaction level	4.31	4.25	4.25	4.31	4.35
Satisfaction level is based on a 5-point scale score	Very satisfied 《5》	Satisfied 《4》	Normal 《3》	Not satisfied 《2》	Very dissatisfied 《1》



### 3.4 Sustainable supply chain management GRI 204-1, GRI 308-1, GRI 414-1

In addition, we require that the supply chain understands and appreciates our sustainable operations and supplier code of conduct. We tolerate no compromises, corruption, or bribery activities. Chroma is committed to the implementation of environmental protection and care for the workplace environment and the safety of our employees. We make every effort to reduce environmental impact and protect the health and welfare of our employees. We also require our suppliers to care for their workplace environment, the safety of the supply chain workers and ensure that they are treated with respect and dignity. We expect business operations to be environmentally responsible and conducted ethically. Compliance to these requirements by a supplier is one of the major considerations of a procurement decision.

As climate change worsens, specific economies are committing to challenging greenhouse gas reduction targets to achieve global net-zero sustainability. While Chroma has promised to reduce the carbon footprint of its own products and services, it now also expects its international trading partners and suppliers to pursue the same sustainable goal. Manufacturing has always focused on the improvement of production capacity and yield. Now net-zero manufacturing has been added as a target and in addition to fast and good production, more emphasis is being placed on clean production.

#### 3.4.1 Key components and control of hazardous chemical substances

By implementing eco-design with respect to materials, parts, accessories, and packaging, and based on our "Standards for Controlling Hazardous Chemical Substances in Materials", we have categorized environmentally controlled substances into the following five groups:

1. RoHS-limited substances: All hazardous chemical substances restricted or limited by the EU Restriction of Hazardous Substances (RoHS) and Chinese Measures for the Control of Pollution from Electronic Information Products.
2. REACH-SVHC-limited substances: Substances of Very High Concern (SVHC) to humans and the environment published by the European Chemical Agency (ECHA).
3. Other regulatory limited substances: Hazardous chemical substances whose use is restricted or limited by law in the major trading countries. Please refer to IEC 62474 - Material Declaration for Products of and for the Electrotechnical Industry.
4. Ozone Depleting Substances (ODS): Please refer to the controlled chemical substances published in the Montreal Protocol.
5. ELV- and GADSL-limited substances: Controlled substances defined in the Directive 2000/53/EU on End-of-Life Vehicles (ELV) and Global Automotive Declarable Substance List (GADSL). We also require suppliers to sign a "Statement of Environmental Protection" and the "Statement of SVHC Substance-Free and Conflict Metal-Free" to ensure continuous legal compliance of mass-produced products and to ensure Chroma maintains production sustainability. We have introduced the concept of green product design in the R&D process. This division is tasked with making products more energy-efficient and ensure their compliance with all the regulations on hazardous chemicals. We use renewable and recyclable materials as many as possible. Improvement and evaluation are carried out on a continuous basis to ensure that our mass-produced products meet the requirements and standards of quality assurance and environmental protection.

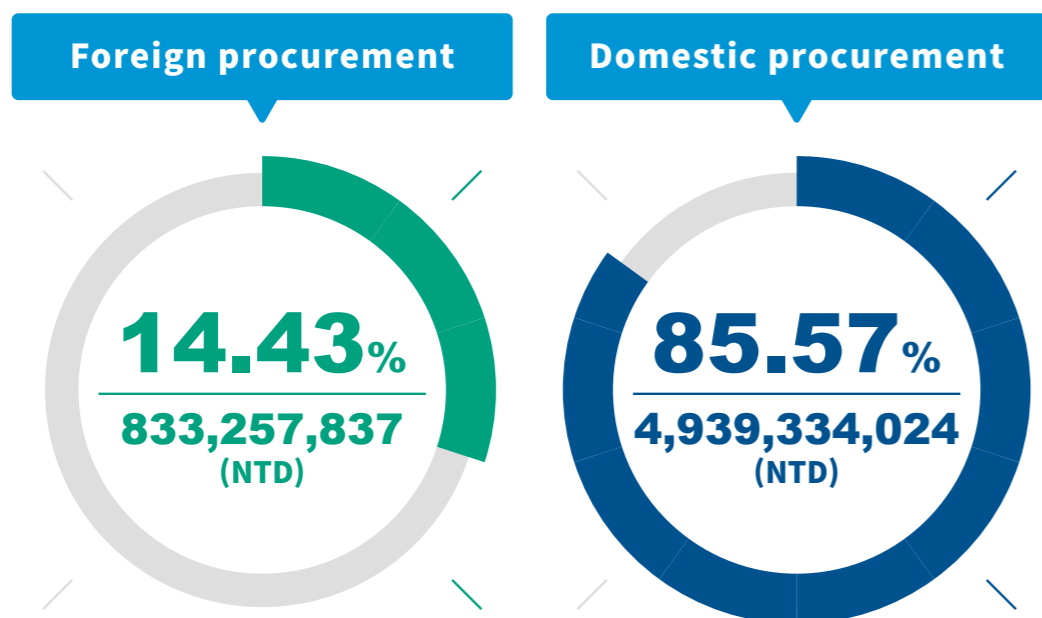
In addition to controlling hazardous substances, the R&D unit also actively introduces circuit digitization technology to reduce the number of parts and components and promotes shared module design thinking for different products. The sharing of specific modules reduces the number of semi-finished products and the total number of parts and components. It also makes the launch of new products more efficient and extends green product coverage. IT can also reduce energy consumption in both procurement and production.

Our strategic partnerships with suppliers are not only important because they allow us to offer our customers valued products and services, but because they include great social and environmental value. We have a vital corporate mission “to develop globally leading products as a world-class enterprise” using a sustainable supply chain. We share this social and environmental responsibility with the supply chain.

Chroma and its subsidiaries produce a diverse assortment of instruments in small quantities. A wide range of raw materials are required which include main materials such as programmable gate array ICs, converter ICs, memory chips, relays, materials for making enclosures, PC boards and so on. Currently, we have three or more suppliers for each type of material who are our long-term partners. We have excellent relationships with our suppliers who are all distributors for the products of world-famous manufacturers, and their quality and supply of materials are stable. At present, materials are collectively purchased from domestic and foreign manufacturers by our procurement unit. If possible two or more competitive suppliers are selected for each component which must always be interchangeable. This diversification minimizes procurement risk, keeps the prices down, and allows us to enjoy better services. The procurement unit regularly reviews the prices and the suppliers are audited by our quality control and procurement personnel to ensure both quality and stability and to monitor their manufacturing capacity and supply.

There were no significant changes in the main supplier data or their consolidated financial statements in 2022. (Suppliers of more than 10% of net purchases in the last two years). As there were 91 new suppliers, onsite evaluation is conducted on 13 suppliers each year.

Suppliers are key partners in our Company operations and share our common pursuit of sustainable management and growth. We adhere closely to a policy of local procurement to maintain a highly efficient and versatile supply chain. Chroma maintains a local Taiwan procurement rate of more than 85%. (‘local’ means ‘in Taiwan’).

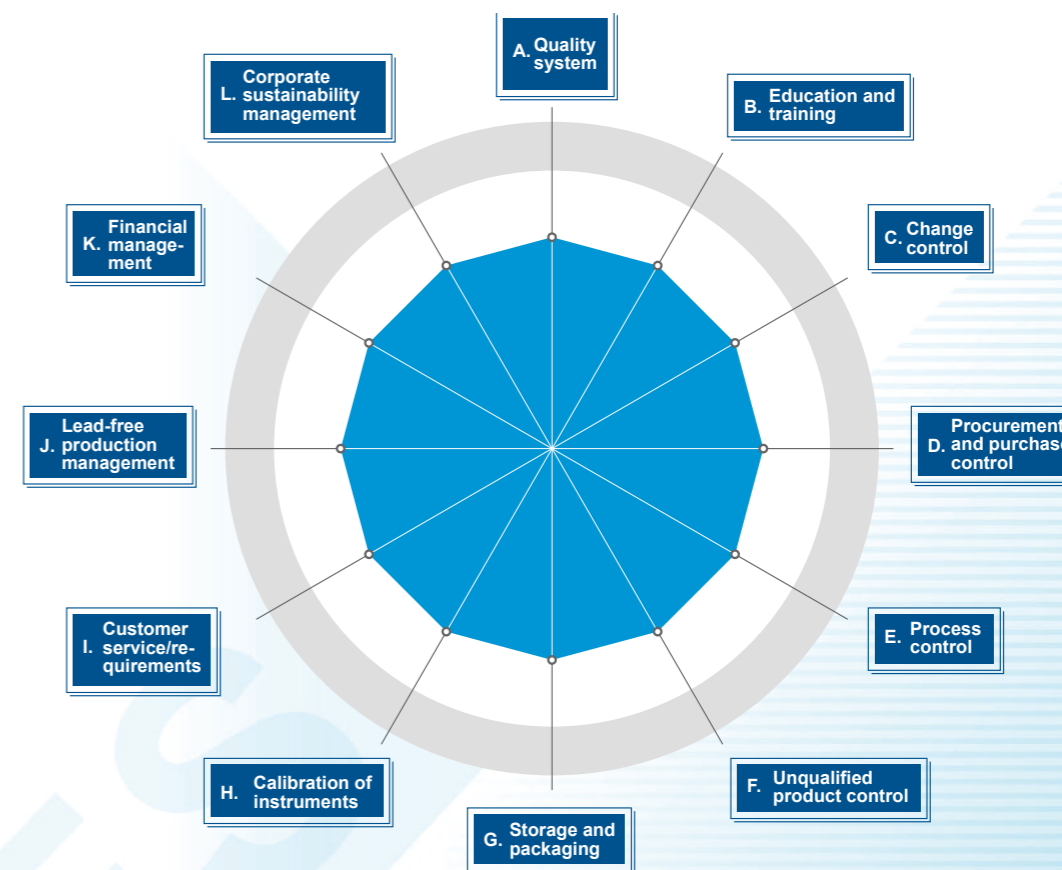


### 3.4.2 Selection and recognition of new suppliers

The selection of a new supplier is done in accordance with the “Supplier Management Procedure”. The procurement unit requests price, delivery time, specifications or samples of the material from the supplier and submits the information to the relevant units for confirmation. The supplier is also required to make a self-evaluation. In addition to ISO 9001/IATF 16949 certification and compliance with SONY Environment-related Substances to be Controlled requirements, we also encourage new suppliers of direct materials to have ISO 14001 certification. Furthermore, they must also pass an physical inspection audit of procurement, quality, technology, and hazardous substances before they are eligible to become qualified Chroma suppliers (vendors). A total of 12 evaluation items are listed as A to M below. This must include corporate sustainable management, such as CSR and hazardous substances management; environmental management including energy and GHG emission; occupational safety and health management including labor health and workplace safety. Furthermore, suppliers determined to have “likely” impact on the life cycle as specified in the “Regulations for Identification of Environmental Aspects and Risk Assessment” are requested to complete and sign a “New Suppliers Environmental Management Survey Form” to validate their achievements in environmental management and environmental protection.

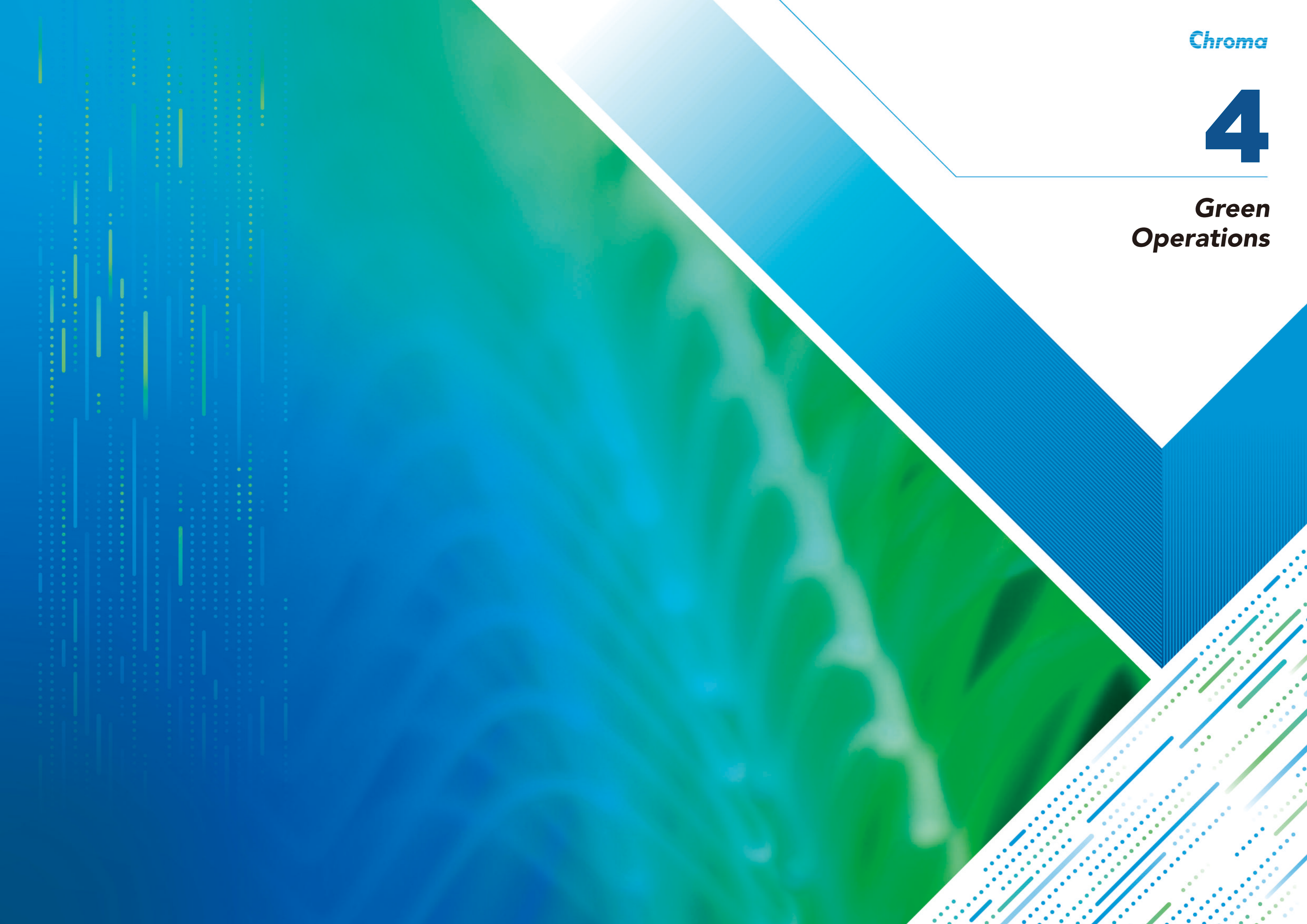
Suppliers of Medium / High risk levels and those engaging in transactions exceeding a value of NTD 5 million have to be evaluated. In 2022, 96 suppliers were evaluated, and the results showed that 3 were considered to be high-risk (H), the others fell into the medium (M; 22 suppliers) to low (L; 71 suppliers) risk range. We referred the high-risk suppliers to the environment and safety unit and a survey was conducted using the Environmental, Health, and Safety Checklist to determine the need for physical inspection audit. After re-evaluation, the environment and safety unit lowered the risk level of the three high-risk suppliers to medium-risk.

Note: H-level means having been sanctioned by the competent authorities in the past three years; M-level means being control-listed by the environmental protection unit.



Note: H-level means having been sanctioned by the competent authorities in the past three years; M-level means being control-listed by the environmental protection unit.

**Green  
Operations**





“Energy conservation, carbon reduction, and the lowering of environmental impact” are in our vision for “environmental sustainability management”. We have built an environmental management system (EMS), to address global climate change and develop green design to help lower environmental impact.

Aspect	Environmental (E)
<p>Material topic</p>	<p>Energy and GHG management, green products and services (hazardous substances management), waste management.</p>
<p>Management Mechanism</p>	<ol style="list-style-type: none"> <li>1.ISO 14001:2015 EMS certification and the plan-do-check-act (PCDA) cycle ensures that all pollution sources are managed using standardized processes in full compliance with the laws and regulations to improve environmental performance.</li> <li>2.By applying green design at all stages of the product life cycle we reduce environmental impact and ensure responsible production and consumption.</li> <li>3.GHG emission in the base year was re-calculated based on the ISO 14064-1:2018 standard and further energy saving measures were developed according to the quantitative inventory results.</li> </ol>
<p>Commitments and Policies</p>	<p>We understand climate change issues and continuously engage in energy reduction and GHG reduction to implement source management and target reduction.</p>
<p>Mechanism and Outcome of Assessment in 2022</p>	<ol style="list-style-type: none"> <li>1.After the first Chroma “Climate-Related Financial Disclosures Report” (TCFD) was published in 2022, we set targets and formulated countermeasures. The progress and achievements of all the countermeasures have been systematically disclosed.</li> <li>2.Parts for the close-loop control in new-generation PSUs can be reduced by up to 50% compared to those of the former-generation PSUs. Enhancement of energy conversion has allowed the overall efficiency of the new-generation 61815 PSU to be raised from 75% to 87% compared to the earlier generation 61512 PSU.</li> <li>3.Energy intensity amount in 2022 increased by 11.4% over 2021.</li> <li>4.In 2022 we reduced industrial waste by 4.97% over 2021.</li> </ol>
<p>Medium-term and Long-term Goals</p>	<ol style="list-style-type: none"> <li>1.We have made improvements in production methods, engaged in extensive green design and improved the office environments with the aim of moving from low-carbon to net-zero.</li> <li>2.In October 2022 the Chroma ESG Team identified and made an initial assessment of climate change risks and opportunities. Each department sets KPIs for relevant work, and team members hold progress follow-up meeting each month to ensure all KPIs and tasks have been accomplished.</li> </ol>
<p>Resources/ Actions/ Grievance Mechanisms</p>	<p>R&amp;D and manufacturing , ESG working team, the environmental safety center.</p>



4.1

Environmental sustainability management

“Energy conservation, carbon reduction, and the lowering of environmental impact” are in our vision for “environmental sustainability management”. We have built an environmental management system (EMS), to address global climate change and develop green design to help lower environmental impact. The increase in human activities, the loss of energy and various resources and climate change have become major issues that the world must face. The greenhouse effect causes climate change and extreme weather as well as serious natural disasters. The use of vast amounts of energy and the excessive development and use of water resources, exhaust gases and the huge amounts of waste that pollute the land, the water sources and the oceans, are all seriously affecting our planet and impacting human activities and life. Extraordinarily heavy rainfall, caused by extreme fluctuations of temperature, is also occurring more frequently. Capturing the risks and finding potential opportunities from within are vitally important for businesses pursuing sustainable development.

R&D is actively implementing the design and manufacture of green products and we have set environmentally sustainable development as a goal. The use of hazardous substances is properly managed. We are enhancing the energy efficiency of power products and increasing the proportion of product recovery. We use the division of labor across departments to actively manage a range of environmental protection measures and encourage an awareness of environmental protection in all our employees. By promoting environmental protection and setting KPIs, we inspire our employees to identify with the corporate culture of environmental sustainability and protection.

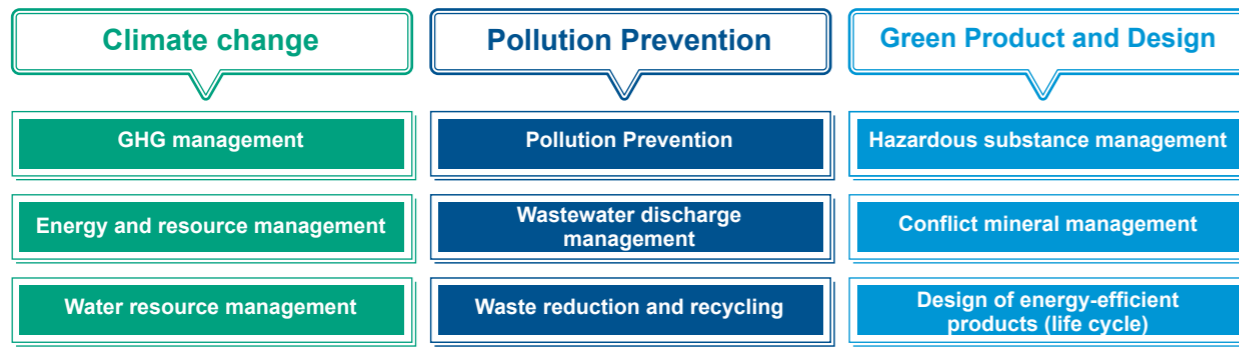
Chroma has ISO 14001:2015 EMS certification and uses a plan-do-check-act (PDCA) cycle to ensure that all pollution sources are managed according to standardized processes in compliance with the laws and regulations to improve environmental performance and optimize EMS. Chroma also has third-party verification of ISO 14064-1:2018 which allows quantification of GHG inventory and third-party assurance. Total control is applied starting from the three main aspects of environmental management: climate change, green products and design, and pollution prevention. It also includes product life cycle, design, material supply, manufacturing, plant operations, the final product, after-sales service, and legal and proper waste disposal to reduce negative impact on climate change and environmental hazards in the whole product life cycle.



ISO 14001:2015 Certificate

ISO 14064-1:2018 Verification Opinion Statement

Three Aspects of Environmental Management



4.2 Green sustainable design

Demonstrate the outcome of technology innovation for outstanding performance and function in new products and implement green design at all stages of product life cycle to reduce environmental impact and realize responsible production and consumption.



4.2.1 Acquisition of raw materials stage (R&D)

To develop energy-efficient green products our R&D department starts with the control and reduction of parts and components, the reduction of energy consumption, and the enhancement of energy efficiency, as follows:

1. Control and reduction of parts and components

In addition to the implementation of the eco-design concept in materials, parts, accessories, and packaging materials and the definition of environmental controlled substances based on our "Standards for Controlling Hazardous Chemical Substances in Materials", we also require suppliers to sign a "Statement of Environmental Protection" and "Statement of SVHC Substance-Free and Conflict Metal-Free" to ensure Chroma mass-production is in full legal compliance with the law and maintains sustainable development. We have introduced the concept of green product design in the R&D process. This division is tasked with making products more energy-efficient and ensure their compliance with all the regulations on hazardous chemicals. We use renewable and recyclable materials as much as possible. Improvement and evaluation are carried out on a continuous basis to ensure that our mass-produced products meet the requirements and standards of quality assurance and environmental protection.

In addition to the control of hazardous substances, the R&D unit also actively introduces circuit digitization technology to reduce the number of parts and components. It promotes shared module design thinking to reduce the quantity of semi-finished products and the number of different parts and components. In addition to more efficient launch of new products to extend green product coverage, this can also reduce the energy used in procurement as well as production.

2. Reduction of energy consumption

We continuously develop different types of technologies that can satisfy customer demand and reduce energy consumption at the same time. An example of this is energy recovery technology for electrical and electronic equipment. Energy dissipated in the form of heat is fed back into the grid as electrical energy to significantly reduce total energy consumption. This energy recovery technology is mostly used in AC/DC power supply equipment, but Chroma is using it to develop a regenerative load (sink) function, which will extend the range of application of the technology and significantly increase the overall energy recovery rate. We have also

introduced a standby mode into many products. The equipment enters a Power Saving Mode when there has been no output for some time.

3. Enhancement of energy efficiency

In addition to the active reduction of energy consumption in our equipment, we also consider how we can help customers reduce energy consumption by using it more efficiently. We have also invested more R&D resources for research into the development of innovative technology that will enhance energy conversion efficiency, inspection accuracy, power and channel density, and others.

4.2.2 Production and manufacturing stage

We continue to expand the coverage of automatic testing during production and manufacturing to significantly reduce the need for manual testing and effectively reduce testing lead-time. We have also implemented energy regeneration and added smart control to the equipment burn-in process to collect data on burn-in chamber energy conservation and reduce consumption.

Our testing equipment is characterized by high mix low volume (HMLV). In response to a demand for diversity, we need to build or adjust highly-versatile production/testing equipment. By introducing shared modules and digital circuits, we can reduce the number of components in the devices and the time needed for maintenance or adjustment.

Project	Improvement
Reduce production costs through lean improvement	Quality Assurance has built a modular ATS and uses it for regular product inspection and analysis. Many lean improvements are being made to enhance management efficiency, as in the DIP automatic soldering machines, automatic coating processes, optimization of the M&E product freezing module (Cobra), and others.
Smart production is being used to reduce costs in collaborative manufacturing processes.	Single board automatic testing has been optimized to speed up the tempo of production. Intelligent transformation of the whole machine and automation of system testing simplifies analysis.
Reduce energy consumption by the product ageing process to conserve energy and reduce carbon emissions.	AI has been introduced to optimize and improve the MES project function. Use energy-efficient equipment in the product ageing process for power measurement and to monitor instrument products using smart monitoring which also reduces energy consumption.
Monitor the production environment	Production environment monitoring has been implemented to ensure process environment quality (clean room, product ageing chamber, optical product testing room).
Improve ergonomics	Labor-saving equipment is being used in product packaging to improve ergonomics, reduce labor and handling, and ensure occupational safety.

Project	Improvement	Electricity Saved (kWh)	Labor Saved (hours)
Reduce production costs through lean improvement	Quality Assurance has built a modular ATS and uses it for regular product inspection and analysis.	--	276
	Lean improvements have been made to enhance management efficiency for the DIP automatic soldering machines, to optimize automatic coating processes, and to optimize the M&E product freezing module process.	--	9,920
Smart production is being used to reduce costs in collaborative manufacturing processes.	Single board automatic testing has been optimized to speed up the tempo of production.	--	6,435
	Intelligent transformation of the whole machine and automation of system testing simplifies analysis.	--	10,041
	AI has been introduced to optimize and improve the MES project function.	--	3,196
Reduce energy consumption by the product ageing process to conserve energy and reduce carbon missions.	Use energy-efficient equipment in the product ageing process for power measurement and to monitor instrument products using smart monitoring which also reduces energy consumption.	358,887	--

#### 4.2.3 Delivery and sales stage

The size and weight of equipment and the ease of transportation and installation are highly interrelated. We use innovative technology to reduce the size and weight of instruments and equipment, reduce the number of parts and components, and enhance the density of testing channels to maintain the same testing density as in traditional design, but in a smaller package. These measures make transportation more energy-efficient and also simplify installation. Smaller and lighter instruments and equipment are also easier to pack and transport while requiring less packaging and protective material.

#### 4.2.4 Product use stage

Integrated software control significantly enhances efficiency and reduces manual operational errors at the same time. We have also developed multifunctional equipment that allows users to make versatile combinations and reduce equipment idle time.

#### 4.2.5 Disposal and recovery stage

In addition to ongoing efforts to minimize packaging materials for protection during transportation, we have effectively reduced the amount of packaging materials used, and the waste generated by products themselves at the end of life (EOL), by reducing the size and weight of instruments and equipment.

It is the responsibility of the user to handle the disposal and recovery of packaging materials and even the equipment at the end of its life (EOL). However, the PCBA, casing, standard accessories, and packaging materials all contain toxic and harmful substances or elements (including lead, mercury, and cadmium, hexavalent chromium, polybrominated biphenyls and diphenyl ethers and phthalates, etc). However, the content of these substances in all the homogeneous materials of our products are in line with SJ/T 11363-2006 and EU Directive 2011/65/EU and 2015/863/EU regulations. We also provide detailed disposal instructions in all our product manuals.

Consider the latest AC Regenerative Grid Simulator Model 61815 and the Bidirectional DC Power Supply Model 62180D-600 as examples. Both are regenerative power supplies that use shared modules. The green design achievements of these models (which have the above measures implemented) are tabulated below to show our active support for ESG requirements.

#### Achievements



Product Life Cycle	Green Design Achievements
Acquisition of materials stage (R&D)	<ol style="list-style-type: none"> <li><b>Reducing the parts and components used</b> Shared modules for energy regeneration equipment for use with AC power (61815) and DC power (62180D-600). These models share more than 80% of parts. They have enhanced energy regeneration functionality as well as a significantly reduced number of semi-finished parts. Circuit digitization and part/component reduction; There are up to 50% fewer parts in these closed-loop controlled new-generation power supplies than in earlier-generation equivalents.</li> <li><b>Reduction of energy consumption</b> We continue to develop innovative energy regeneration technology in other products in addition to the regenerative power supplies. Our regenerative load testing equipment can reduce energy consumption by more than 89% compared to traditional models. A standby mode is now included in many products which reduces power consumption when the equipment has no output load. In the 540kW DC power supply/load testing solution for example, the standby energy consumption has been reduced by 73% (about 16.5kW).</li> <li><b>Enhancement of energy efficiency</b> Energy conversion enhancement in the new-generation 61815 power supply has raised the overall efficiency from 75% to 87% compared to the earlier generation 61512 power supply.</li> </ol>
Production and manufacturing stage	<p>We use SD card duplication, top pin clamps, platform clamps, testing clamps, and automatic testing during production of the AC power supply 61815 to reduce working time by 42 minutes. This has enhanced testing efficiency by about 50%. Introducing the output-output mutual power supply that allows two devices to be burned-in under load during production. In addition to completing the burn-in of two devices at one time, it also has an energy recovery function. For example, the DC power supply 62180D-600 can save 389kWh to reduce burn-in power consumption by up to 90% compared to that of a conventional supply without power regeneration.</p> <p>Each 61815 AC power supply has 25 PCBs, and 11 of them can also be used in the DC power supply 62180D-600, giving a sharing rate of up to 44%. Shared use of power modules allows more models to share the same set of production and testing equipment. This reduces the lead time for re-installation and setup of testing equipment to significantly enhance utilization rate.</p>

<p><b>Delivery and sales stage</b></p>	<ul style="list-style-type: none"> <li>· A comparison with the previous-generation AC power supply 61512 shows that in addition to a weight reduction from 13.3kg/kW to 3.3kg/kW (75%) the size of the 62180D-600 has also been reduced from 24.7 dm<sup>3</sup>/kW to 2.6 dm<sup>3</sup>/kW (89%) to significantly reduce energy consumption for both transportation and installation.</li> </ul>
<p><b>Product use stage</b></p>	<ul style="list-style-type: none"> <li>· In the past, power supply and load testing was done by two different types of equipment, and users needed both of them to satisfy their testing needs. The Chroma 61815 and 62180D-600 have both advanced energy recovery and load functionality. Only one model is needed to meet both application scenarios; this flexibility reduces equipment idle time.</li> <li>· In general power supply tests the input requires power and the output has to be connected to a load. However, in bi-directional electricity conversion products with bidirectional on board chargers, both ports support input and output at the same time. Tests made with traditional equipment require the setup to be changed between the different tests. Testing with the 61815 or 62180D-600 is much simpler and more efficient. The connections remain the same, but the role of the equipment is switched by software. Different testing setups are not needed.</li> </ul>
<p><b>Disposal and recovery stage</b></p>	<ul style="list-style-type: none"> <li>· These new power supplies are so much smaller and lighter than their predecessors that both transport and EOL handling and recover has been much simplified.</li> <li>· The AC power supply 61512 was so heavy it needed to be transported in a wooden box. The 61815 only needs a carton. Cardboard packaging is light, easy to assemble, and safe. Cartons can also be folded to save storage space and facilitate recovery for reuse.</li> </ul>



4.3

Risks and opportunities due to climate change GRI 201-2

As a world-leading supplier of automatic test equipment (ATE), Chroma has customers from a range of industries that include power electronics, passive components, electrical safety, video and color, LCD panels and modules (LCM), automotive electronics, and semiconductors. We are giving global climate issues our serious attention and have been developing and promoting energy-conservation technology to provide automatic test solutions for photovoltaic, LED, lithium battery, power battery, EV, and other industries that manufacture renewable products.

To face the impact of climate change, our working teams have been analyzing climate-related impact in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) formed by the Financial Stability Board (FSB). In addition to analyzing the risks due to climate change and our own counteractions, we are also identifying opportunities for new products and markets. We have set a net-zero emission target for 2050 and started the move towards net zero with production and office environment inventory, production process improvement, and green product design.

In the following sections, we will describe our approaches to climate-related risks and opportunities in terms of the four sections recommended by the TCFD

Governance

- 1-1 The Board is the top governance body for the management of climate-related risks and opportunities. The Board supervises and reviews strategic development and policy making. This will include all aspects of risk identification and strategy planning to ensure that we can reduce future impact and develop potential opportunities.
- 1-2 Board members are fully aware of the materiality and impact of climate change and have taken this issue into account when material investment decisions have been made. For example, issues including carbon management and how to address risks from climate change through energy and resource use are fully considered and discussed.

Strategy

2-1 The ESG working team has assessed the 17 climate-related risks and 20 climate-related opportunities recommended by the TCFD based on core ATE business and future market development. After discussions and the prioritization of these risks based on their likelihood and urgency (short-, medium- and long-term), a risk matrix was produced.

Risk Management

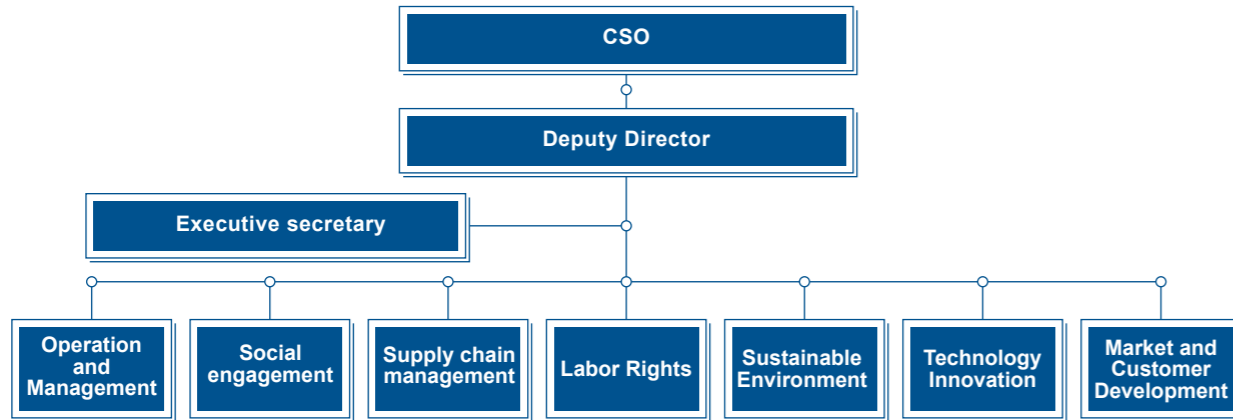
- 3-1 The assessment of climate-related risks by the ESG team revealed 13 transition and 4 physical risks. These are listed in the TCFD recommendations and WEF Global Risks Reports, with the 2050 estimates of Taiwan climate change, research reports, and in consideration of the actual market situation.
- 3-2 Chroma published their first Climate-Related Financial Disclosure Report in 2022. In the future, we will perform risk assessment each year to manage identified climate-related risks and opportunities. The results will be disclosed in the annual ESG reports after approval by the board.

Risk Management

- 4-1 The ESG working team identified the counteractions that needed to be taken immediately, based on the above strategy and risk management process. The metrics that will be followed up in the future are shown below. Quantitative management of each of these metrics will be carried out from 2023.
- 4-2 We will set net zero 2050 as the target for GHG emissions. We passed the third-party verification for GHG emissions as per ISO14064-1 in 2021. We will continue to gather data related to carbon emissions using the established methods to ensure the accuracy of GHG emission measurements. Stakeholders will be informed about the GHG emissions, details of which will be disclosed in the annual ESG reports.
- 4.3 In light of the global trend towards net zero emissions and the introduction of the Carbon Border Adjustment Mechanism in Europe and the US, the transformation to net zero is no longer just an environmental issue. It has now become an economic issue connected with the international competitiveness of every single company. While continuously deploying renewables, industries are also driving opportunities for smart cities, smart transportation, smart grids, and energy storage. We have already developed solutions for related renewable technologies and earned the recognition of international first-tier manufacturers. We have also engaged in the R&D of various regenerative testing solutions using innovative technology to meet the demands of global green initiatives. This also helps our customers reduce their carbon emissions and huge electricity bills, and more importantly, accelerates low-carbon product development. We will continue to develop products that help users enhance efficiency and provide customers with more solutions. After publishing the "Climate-Related Financial Disclosures Report" for the first time in 2022, we have set targets, formulated countermeasures and counteractions, and regularly disclose our achievements and progress.

4.3.1 Governance

Climate Change Governance and Management Framework



The Chroma ESG Working Team was established in 2022 with authorization of the Board. The vice president is the chief executive officer who reports to the chairperson. As climate change issues involve various fields, the Chroma ESG Working Team selected representatives from different departments based on function to assess risks and opportunities and discuss counteractions. The departments and units that participated in assessing climate change issues included: Innovation and R&D, operations, production, procurement, finance, environmental safety, and the human resources departments. Directors or officers of high rank in each of these departments participated in discussions to help the company judge future market opportunities, operational impacts, the significance of risks (scale and scope), and the frequency of risks (intensity) of climate change. With the premise of maintaining normal business operation, the team discussed how the most likely risks would be addressed as well as the appropriate mitigation and adaptative actions that needed to be taken.

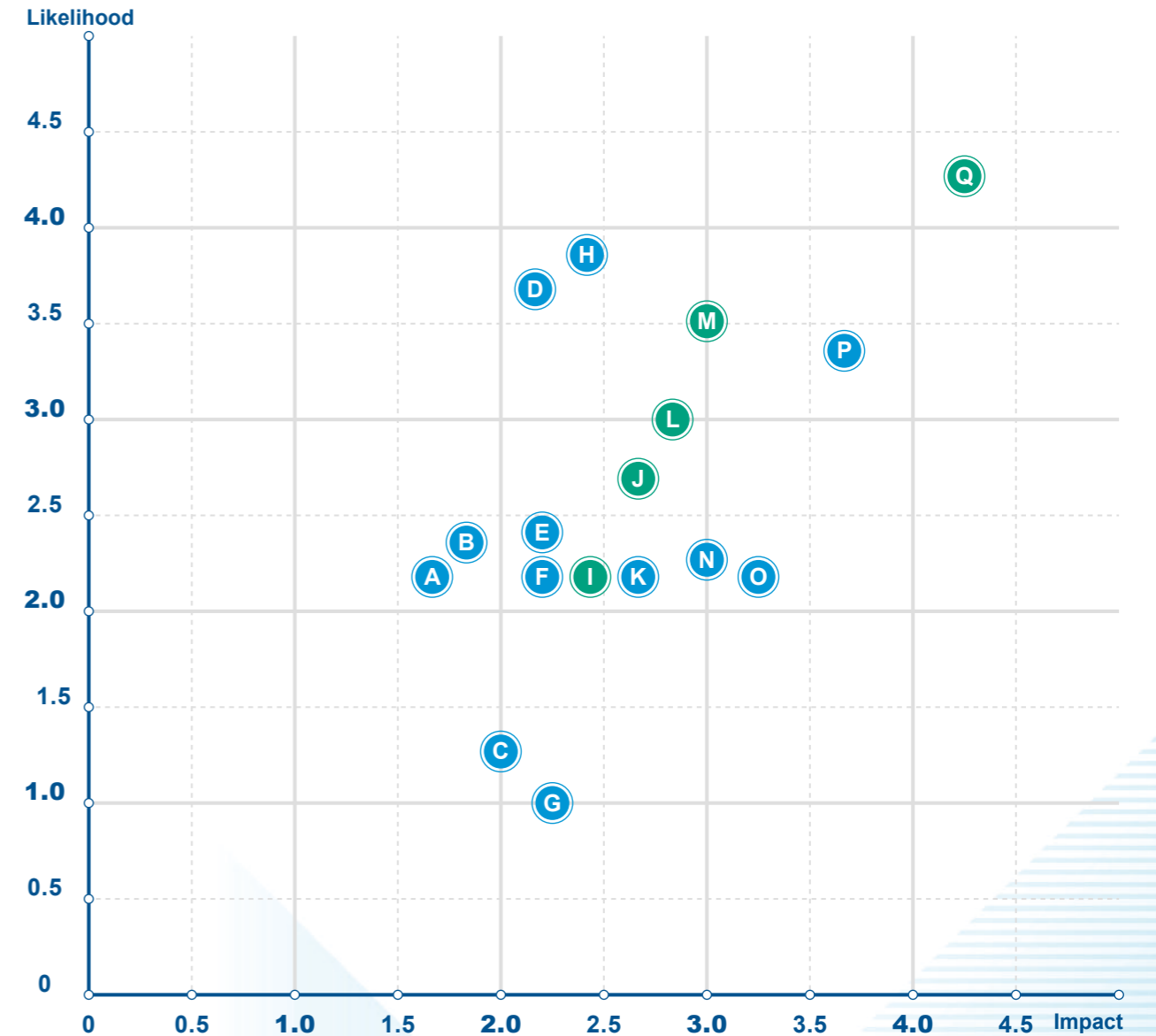
After systematic discussion by officers from the departments concerned, the Chroma ESG Working Team completed the first assessment of climate change risks and opportunities and identified them in October 2022. The team also devised suitable action plan for major risks and opportunities and instructed the relevant departments to follow them up and report assessment results via the administration system. Each department sets KPIs for relevant work and team members will hold progress follow-up meeting each month to ensure all KPIs and tasks have been accomplished.

4.3.2 Strategy: The impact of climate-related risks and opportunities on corporate operations and future market expansion.

1.Results of identification of climate-related risks and countermeasures.

1.Results of identification of climate-related risks and countermeasures.

By categorizing climate-related risks according to their impact and significance as well as the likelihood of their occurrence, we were able quantify comparative impacts and determine strategies, as well as the most likely opportunities for addressing them. A climate-related significant risk matrix was then produced as shown below:



- (A) Rising sea levels
- (B) Rising average temperature
- (C) Exposure to litigation
- (D) Increased carbon pricing
- (E) Changes in precipitation patterns and extreme variability in weather patterns
- (F) Shifts in consumer preferences
- (G) Stigmatization of sector
- (H) Enhanced emissions-reporting obligations
- (I) Uncertainty in market signals
- (J) Increased severity of extreme weather events such as cyclones and floods
- (K) Unsuccessful investment in new technologies.
- (L) Mandates on the regulation of existing products and services
- (M) Costs of transition to lower emissions technology
- (N) Changing customer behavior
- (O) Increased stakeholder concern or negative stakeholder feedback.
- (P) Substitution of existing products and services with lower emissions options
- (Q) Increased cost of materials

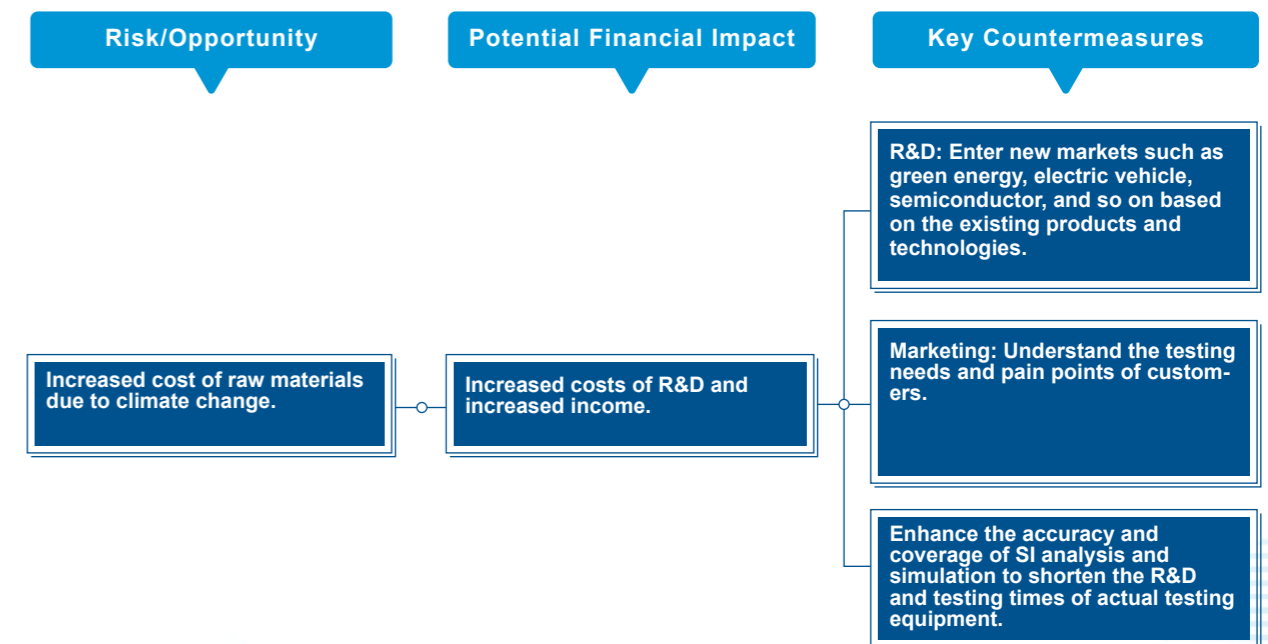
\*● Short-term risks (1-3 years) ● Medium- and long-term risks (3-10 years)

After determining the significant climate-related risks based on the risk matrix ranking, the ESG working team conducted financial assessments and countermeasures to further assess the potential impact climate change risk. The aim of the ESG working team was to ensure business continuity and the facilitation of sustainable operations.

Our assessment revealed four transition risks and one physical risk and their potential financial impacts can be inferred as follows:

	Duration	Risk Category	Significance to Chroma	Subsequent Financial Calculation Need	Countermeasures
1	Short-term 1-3 years	Transition risk: Increased cost of materials	Increased procurement costs as a result of raw material shortages due to climate change. Eventually, this leads to increased manufacturing cost.	(1) Potentially affected items and the scale of impact; (2) affected products and the scope of impact. (3) Start and end time of impact.	<ul style="list-style-type: none"> <li>· R&amp;D: Increase the use of shared materials, modularize product design, use eco-friendly materials and recyclable parts, and design more energy-efficient products and machines.</li> <li>· Procurement: Centralize procurement, find a green supply chain, and select the top five suppliers by purchasing amount to reduce carbon emissions.</li> <li>· Manufacture: Plan for easy manufacture and automated production</li> </ul>
2	Short-term 1-3 years	Transition risk: Costs of transition to lower emissions technology.	Net zero emissions have become a vital global necessity. After COP27, it became clear that the world would reach peak carbon dioxide emissions in 2025. As the demand for carbon reduction continues to rise, we have no choice but to transition to lower emissions technology. The cost will increase due to capital expenditure and overall technology improvement.	(1) Affects downstream fields (2) Costs for introducing low emissions technology (capital expenditure) (3) Increased overall costs due to low emissions technology (range of cost increase per piece)	<ul style="list-style-type: none"> <li>· R&amp;D Assess appropriate low emissions technology</li> </ul>
3	Short-term 1-3 years	Physical risk (acute): Increased severity of extreme weather events such as cyclones and floods	Increased possibility of typhoons and torrential rain and flood inundation around the factories or local communities due to extreme weather events. Assessment shows the Guishan Plant is unlikely to be affected by floods because it is at a high elevation. However, external transportation may be interrupted by bad weather which could lead to reduced income or increased costs.	(1) Costs of the business continuity plan (BCP) (2) Costs of alternative solutions	<ul style="list-style-type: none"> <li>· Environmental safety: The potential significance of impact will be assessed and contingency measures will be introduced.</li> </ul>
4	Medium-long term: 3-10 years	Transition risk: Substitution of existing products and services with lower emissions options.	If Chroma is unable to quickly master low emission production technology, or if competitors launch them ahead of us, our market share and income will be reduced.	(1) Potential scale of impact (2) Costs of alternative solutions	<ul style="list-style-type: none"> <li>· R&amp;D Implement new-generation renewable technology to lead market demand and increase market share.</li> <li>· Market: Collaborate in branding projects with leading laboratories to become an initiator of standards.</li> </ul>

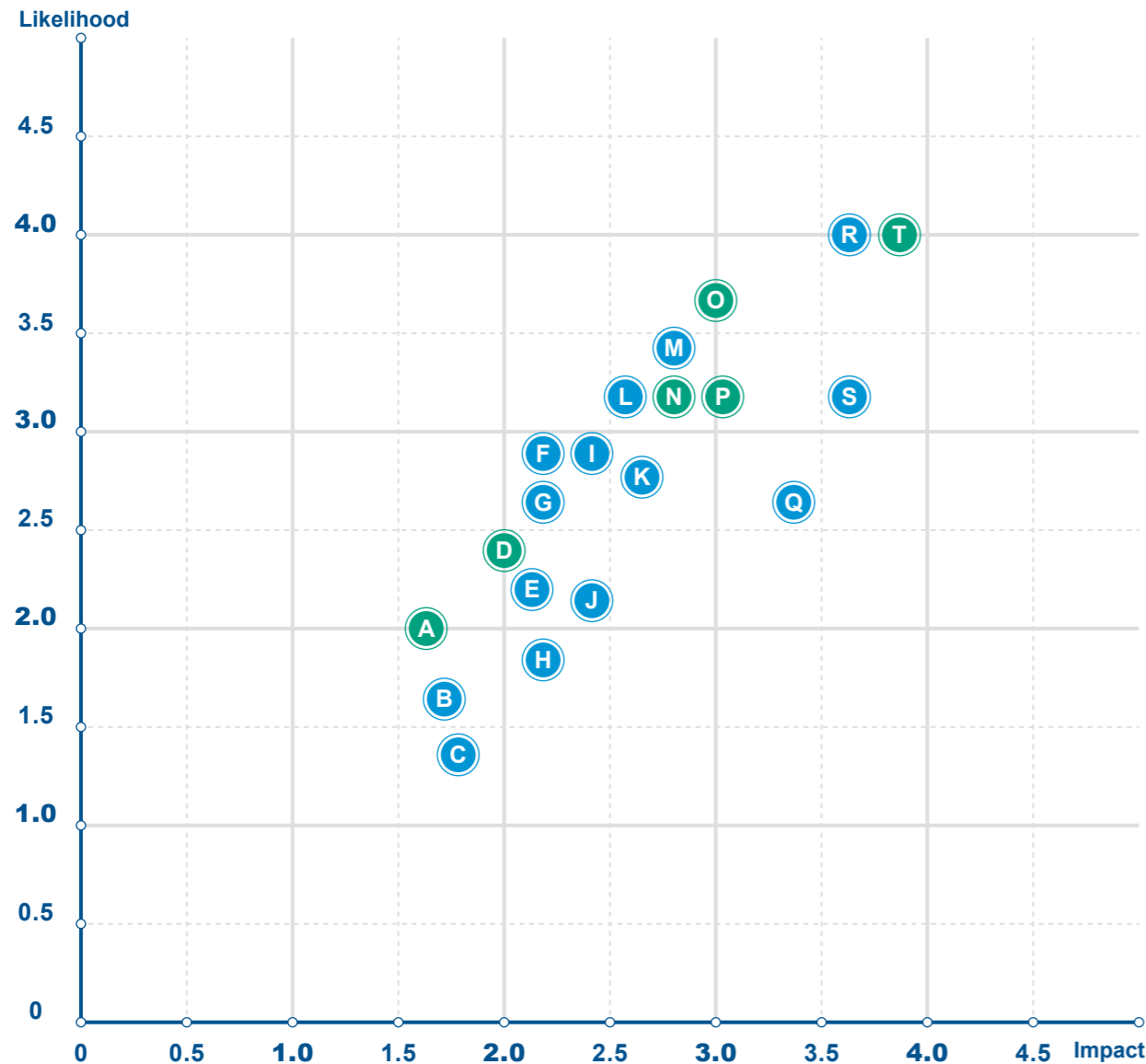
5	Medium-long term: 3-10 years	Transition risk: Increased The cost of GHG emissions	When net zero GHG emissions are the grand target, they will be affected by policies and carbon pricing. Although our manufacturing processes have low carbon emission, increased GHG pricing will affect production to a certain extent and this will lead to an increase in overall cost.	(1) Costs of carbon pricing (2) Costs of alternative solutions	Chroma is actively planning internal carbon pricing and will make adjustments after a National policy has been decided.
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Chroma will respond to the development of a low-carbon economy by accelerating the development of products with low emission and the related technology. Although an assessment by the ESG Working Team and management suggests that climate change will bring more opportunities than risks, we need to consider both aspects at the same time, while also emphasizing opportunities for market expansion.

2. Results of identification of climate-related risks and countermeasures.

We have categorized climate-related opportunities based on the significance and likelihood of impact. The results are shown in the figure below. The management team holds that climate change has presented many new opportunities. These will promote R&D and innovation and the development of new products and services. The result will be an expansion of low emission goods and services, and the diversification of business activities.



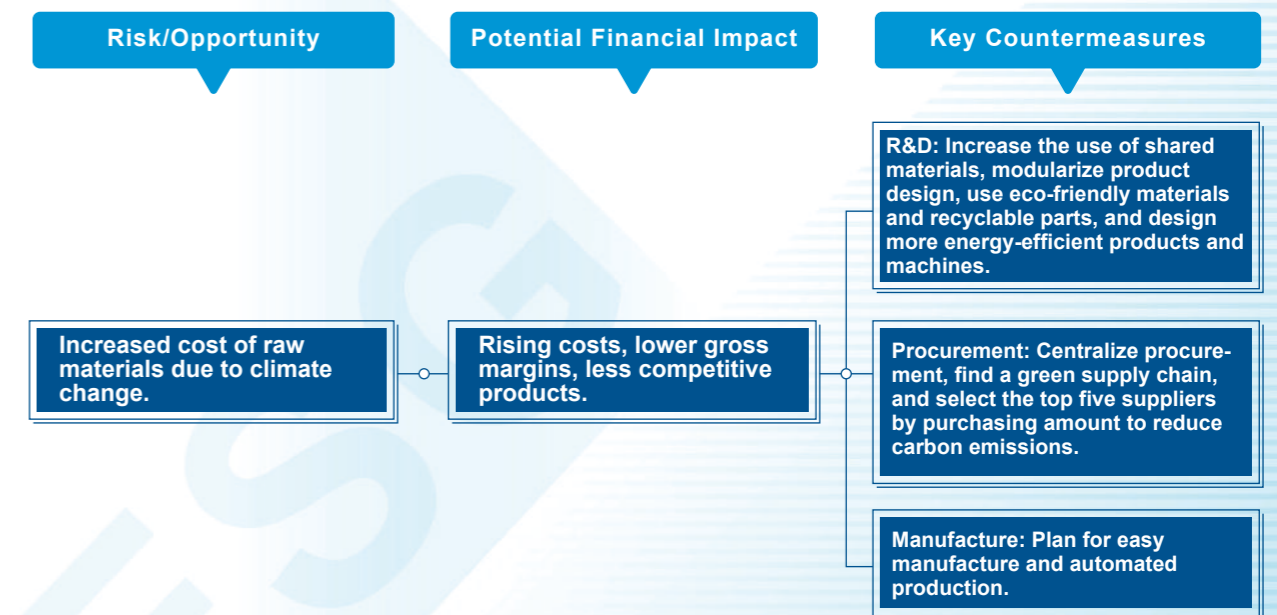
- (A) A reduction in the use and consumption of water.
- (B) Access to new assets and locations needing insurance coverage
- (C) A shift toward decentralized energy
- (D) Use of more efficient modes of transport.
- (E) Participation in the carbon market.
- (F) Use of public-sector incentives.
- (G) Use of supportive policy incentives
- (H) Development of climate adaptation and insurance risk solutions
- (I) Recovery
- (J) Move to more efficient buildings
- (K) Resource substitutes/diversification
- (L) Use of lower-emission energy sources
- (M) Participation in renewable energy programs and the adoption of energy efficiency measures
- (N) Shifts in consumer preferences
- (O) Ability to diversify business activities
- (P) Use of more efficient production and distribution processes
- (Q) Use of new technologies
- (R) The development and/or expansion of low emission goods and services
- (S) Access to new markets
- (T) Development of new products or services through R&D and innovation

\*● Short-term risks (1-3 years) ● Medium- and long-term risks (3-10 years)

An assessment of the potential financial impact, based on the top three transition opportunities, is described as follows:

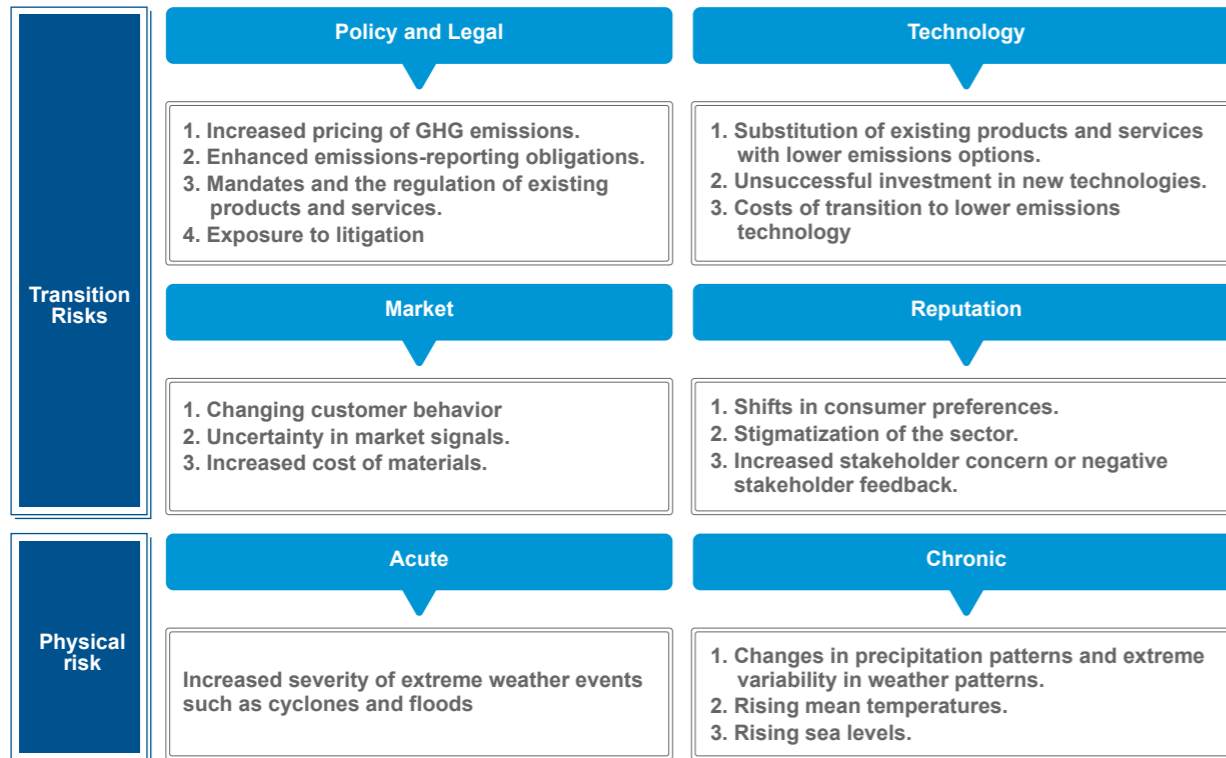
	1	2	3
Duration	Short-term 1-3 years	Short-term 1-3 years	Medium-long term: 3-10 years
Source of Opportunity	Products and services	Products and services	Products and services
Significance to Chroma	Development of new products or services through R&D and innovation.	Ability to diversify business activities	The development and/or expansion of low emission goods and services
Subsequent Financial Calculation Need	Downstream market forecast Speed of new product launch	Average income from existing/new customers	Number of new customers; number of new products.
Countermeasure	<ul style="list-style-type: none"> <li>Market: Study the product demands of each new market and collect new data and investigate the materials and equipment needed to satisfy demand.</li> <li>(1) Assign responsible personnel to analyze new markets.</li> <li>(2) The product manager and sales department must have an accurate and clear understanding of customer demand.</li> </ul>	<ol style="list-style-type: none"> <li>Recruit new R&amp;D personnel who have the necessary technical knowledge.</li> <li>Draw up marketing strategies and plans for after-sales service in the new markets.</li> <li>(1) Develop or hire talented marketing personnel for the new markets</li> <li>(2) Plan a perfect after-sales service system based on the needs of the new markets.</li> <li>Participate in the formulation of protocols for new generation communication standards and set goals for future technological development.</li> <li>Enhance the accuracy of SI analysis and extend the coverage and simulations to lessen R&amp;D and testing time.</li> <li>Accelerate learning speed by the inclusion of academic consultants.</li> <li>Use existing products and technologies to enter renewable, EV, semiconductor, and other industries in new untouched markets to determine customer pain points.</li> </ol>	<ul style="list-style-type: none"> <li>R&amp;D: Implement new-generation renewable technology to lead market demand and increase market share.</li> <li>Assess standard products and the demand for product customization in response to market need to draw up R&amp;D strategies.</li> </ul>
Scale of Impact	+++	++	++

\*Description of the scale of impact +++ large; ++ medium; + small.



### 4.3.3 Risk management

The ESG Office assessed the 13 climate-related transition risks and 4 physical risks listed in the recommendations of TCFD, with reference to the WEF Global Risks Reports, and the 2050 research report estimates of climate change in Taiwan. The actual market situation was also taken into consideration.



We assess the urgency (short-, medium-, and long-term), the likelihood (classified in 5 levels from low to high), and the potential negative impacts (classified in 5 levels from low to high) of each risk. An assessment of actual customer condition is made by the ESG Working Team. A determination of the significance, and priority for address of the relevant risks is made by an internal review.

The first Climate-Related Financial Disclosures Report was published in 2022. In the future, risk assessment will be done annually to manage identified climate-related risks as well as opportunities and set them as a management focus. The results will be disclosed in the ESG report after approval of the board. The ISO 14064-1:2018 GHG inventory was done in 2021 and implementation of the climate-related financial assessment based on the TCFD recommendations was started in 2022. After assessment of the environmental risks, Science-based targets initiative(SBTi) will be set for more active risk reduction.

However, a well-established mechanism for management of climate-related risks is not yet in place. Climate-related risks and opportunities will be integrated into company-wide risk assessment framework. Annual assessment of related risks will be done to ensure we are fully aware of the changes in each risk and are able to establish the management of regulations and measures for risk mitigation.

### 4.3.4 Metrics and targets

Using the above-mentioned strategy and risk management, the ESG Working Team will identify the counteractions that must be taken immediately and the metrics that should be followed up, as shown below. Quantitative management of each of the above metrics will be done from 2023.

\*Please refer to p. 93 of the status of GHG emissions.

Issue	Counteraction	Metrics and Targets
Increased cost of materials	<ul style="list-style-type: none"> <li>R&amp;D Increase the use of shared materials, modularize product design, use eco-friendly materials and recyclable parts, and design more energy-efficient products and machines.</li> <li>Procurement: Centralize procurement, find a green supply chain, and select the top five suppliers by purchasing amount to reduce carbon emissions.</li> <li>Manufacture: Plan for easy manufacture and automated production</li> </ul>	(1) Follow up and increase the proportion of energy conservation. [Define target values] (2) Implement supplier environmental risk assessment and set supply chain carbon reduction targets.
Substitution of existing products and services with lower emissions options	<ul style="list-style-type: none"> <li>R&amp;D: Implement new-generation renewable technology to lead market demand and increase market share.</li> <li>Market: Collaborate in branding projects with leading laboratories to become an initiator of standards.</li> </ul>	Define green products and raise the proportion of green product sales each year. <ul style="list-style-type: none"> <li>The 2022 green revenue of Chroma HQ, Based on EU Taxonomy, was NTD\$5,630,644 thousand. This accounts for 41.8% of the overall revenues of NTD\$13,461,000 thousand.</li> <li>Estimated annual growth will be more than 5% to reach 75% by 2030.</li> </ul>
Costs of transition to lower emissions technology	<ul style="list-style-type: none"> <li>R&amp;D: Assess appropriate low emissions technology</li> </ul>	Same as above
Changing customer behavior	<ul style="list-style-type: none"> <li>Partial function improvement and modular design of existing products.</li> <li>Accelerate the development of renewables and energy-efficient products and exceed market demand by two years.</li> <li>Increase customer adhesiveness and capture the green demand of world-class customers in a timely way.</li> </ul>	Same as above
Severity of extreme weather events such as cyclones and floods.	<ul style="list-style-type: none"> <li>Environmental safety: The potential significance of impact will be assessed and contingency measures will be introduced.</li> </ul>	Assess risks and implement emergency response measures.



We set net zero 2050 as the target for GHG emissions. We received third-party GHG ISO14064-1:2018 emissions verification in 2021. In the future we will continue to gather data related to carbon emissions with the established methods to ensure the accuracy of GHG emission measurements. Stakeholders will be informed about the GHG emissions, details of which will be disclosed in the annual ESG reports.

In light of the global trend towards net zero emissions and the introduction of the Carbon Border Adjustment Mechanism in Europe and the US, the transformation to net zero is no longer just an environmental issue. It has now become an economic one connected with the international competitiveness of every single company. While continuing to deploy renewables, industries are also taking advantage of the opportunities presented by smart cities, smart transportation, smart grids, and energy storage. We have already developed solutions for related renewable technologies and earned the recognition of international first-tier manufacturers. We are also engaged in the R&D of innovative regenerative testing solutions to meet the demands of global green initiatives. In addition to helping customers reduce carbon emissions and their huge electricity bills, we are accelerating low-carbon product development. In the future, we will continue to develop products that help users enhance efficiency and provide them with better solutions. After publishing the Task Force on Climate-related Financial Disclosures Report (TCFD Report) for the first time in 2022, we will continue to set targets, formulate countermeasures and counteractions, and systemically disclose the achievements and progress of these actions.



## 4.4

## Energy and resource management

## 4.4.1 Energy performance GRI 302-1, GRI 302-3

## 1. Electricity and fuel management

The Company uses purchased electricity as a main power source but also uses fuel such as natural gas for cafeterias, dormitories and the health center. Company cars run on gasoline and diesel is used for generators. The statistics on the energy use of our headquarters (including the Huaya Plant), and the Hsinchu and Kaohsiung Branches are shown in the following table.

	2020	2021	2022
1-1 Electricity (MWh/year)	13,651.5301	15,812.574	16,910.28
1-2 Electricity (GJ/year)	4.915x10 <sup>4</sup>	5.692 x10 <sup>4</sup>	6.088 x10 <sup>4</sup>
2-1 Natural gas (NG)(m <sup>3</sup> /year)	56.573	55.625	48.7849
2-2 Natural gas (GJ/year)	2.13	2.10	1.84
3-1 Gasoline (kl/year)	120.97	79.26	73.6174
3-2 Gasoline (GJ/year)	3.95	2.59	2.4
4-1 Diesel (kl/year)	0	2.5	1.1452
4-2 Diesel (GJ/year)	0	0.088	0.04
5. Total energy use (GJ)	4.916x10 <sup>4</sup>	5.692 x10 <sup>4</sup>	6.088 x10 <sup>4</sup>
6. Total consolidated revenue (unit: NTD thousands)	15,532,543	17,584,023	22,067,242
7. Total energy use intensity (GJ/total consolidated revenue (Unit: NTD 1,000))	0.00316	0.00324	0.00362
	---	+2.5%	+11.7%
Ratio and quantity of renewables use	NA	0.002	15,237.89 <sub>(kWh)</sub> note

Reference for conversion factors: MOEA Bureau of Energy - Heat Content of Energy Products (Updated on May 15, 2020)  
Electricity: 860000 kcal/MWh, liquefied petroleum gas (LPG): 12062 kcal/kg, natural gas (NG): 9,000 kcal/m<sup>3</sup>,  
Gasoline: 7,800 kcal/l, diesel oil: 8,400 kcal/l; 1 kcal = 4,186 j  
\*Statistics of renewables consumption began in July 2022.

### 2. Water resource management

Chroma HQ (including the Huaya Plant), Hsinchu Branch and Kaohsiung Branch are located in Hua Ya Technology Park, Hsinchu Science Park, and Nanzih Export Processing Zone respectively. None are located in a protected area. No water from any protected area or watersheds is used, Municipal potable water is the single water source. Our manufacturing process is characterized by assembly and tests and water consumption is low. Most water consumption is for domestic use by employees and some is used by peripheral equipment, particularly for air conditioning. We have no significant environmental impact on water sources or the watershed ecosystem, and did not withdraw the water from water-stressed areas. The generated domestic sewage is processed by appropriate sewage processing facilities or discharged directly into the sewage system pursuant to the law. However, in addition to saving electricity, we recognize that water is an invaluable resource and take measures to reduce water consumption and enhance the efficiency of water use. One way we do this is by a rainwater collection system at the HQ building. Sedimented rainwater is used for irrigation and this effort plays a role in water protection and conservation.

Water consumption and intensity of water consumption of HQ, Huaya Plant, and Hsinchu and Kaohsiung branches over the past three years are as follows:

	2019	2020	2021	2022
1. Water consumption (m <sup>3</sup> /year)	63,162.25	59,637.37	83,835.8	67,151.9
2. Total consolidated revenue (unit: NTD thousands)	13,909,634	15,532,54	17,584,023	22,067,242
3. Total water consumption intensity (water consumption/total consolidated revenue (unit: NTD thousands))	0.00454	0.00384	0.00477	0.00279
Increase or decrease over previous year	--	-15%	+24%	-41%

Sustainability disclosure indicators: Total water withdrawal and total water consumption.

Plant	2022 Water Withdrawal (m <sup>3</sup> /year)	2022 Water Discharge (m <sup>3</sup> /year)	2022 water consumption = 2022 water withdrawal - 2022 water discharge (m <sup>3</sup> /year)	Water source
Headquarters (including the Huaya Plant)	67151.9	Total discharge of domestic water = 22184 m <sup>3</sup> /year	44967.9	Shimen Reservoir
Hsinchu Branch	7093	5674.4	1418.6	Baoshan Reservoir
Kaohsiung Branch	6362	5089.6	1272.4	Agondian Reservoir

There are no sewage meters installed at the Hsinchu and Kaohsiung Branches so sewage has been estimated at 80%.

### 3. Energy conservation measures

We mainly use purchased electricity, and electricity conservation is a Company priority for carbon reduction. We set ESH targets and introduced several energy conservation measures, including aircon energy conservation improvement for Chroma HQ (including the Huaya Plant) and energy-efficient lamp replacement at the Hsinchu and Kaohsiung branches. The effectiveness of the changes at the Kaohsiung Branch were the most significant.

Improvement	Description	Result
Replacement with energy-efficient light fixtures	The existing 28W T5 fluorescent tubes were replaced by energy-efficient 16W LED tubes in the employee canteen at the Kaohsiung Branch.	Electricity saved amounted to 105.6 kWh/year and the carbon reduction was 645 kg/year

#### 4.4.2 GHG Management GRI 305-1; GRI 305-2; GRI 305-4

The Company is in compliance with ISO 14064-1: 2018 and is keeping track of the GHG emissions at headquarters and the branches using an inventory. The Company is watching GHG emissions as part of the development of feasible plans for future reductions. To boost the validity of our GHG inventory information and report as well as the quality of the GHG inventory, an unbiased third-party verification organization has been commissioned to verify our inventory process (after an internal verification process has been completed) to ensure complete inventory procedures and optimal data quality.

GHG emissions were calculated using the operational control method based on the GWP value in the IPCC's Sixth Assessment Report (2021). The GHG emissions inventory covered CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, CFC, PFC, SF<sub>6</sub> and NF<sub>3</sub>. The quantitative inventory can be divided into two parts: Scope 1 direct GHG emissions included fixed, process, mobile and fugitive emissions and Scope 1 indirect GHG emissions included purchased electricity. The ISO 14061-1: 2018 standard was used as an inventory and quantification base, and 2021 is the base year. To ensure effective and accurate monitoring of GHG emissions, we used GHG intensity (tCO<sub>2</sub>e/total consolidated revenue (NTD thousands)) as a GHG management indicator.

The scope of the inventory and quantification covers:

- (1) HQ: Chroma ATE Inc (excluding the areas leased to DynaScan Technology Corporation and Adivic Technology Co Ltd)
- (2) Huaya Plant
- (3) Hsinchu Branch (excluding the areas leased to the Testar Electronics Corporation).
- (4) Kaohsiung Branch

### 1. Categories 1 and 2 GHG emissions in 2022

	Headquarters	Huaya Plant	Hsinchu Branch	Kaohsiung Branch
Category 1 emission GHG emissions and removals (tCO <sub>2</sub> e/year)	183.5148	154.6680	17.3043	43.2160
<b>Total</b>	398.7031 <sup>1</sup> less than in the base year			
<b>Base year (2021)</b>	11,584.5995 Category 1 (tCO <sub>2</sub> e/year)			
CO <sub>2</sub> (tCO <sub>2</sub> e/year)	178.3058	40.1454	16.6210	26.2791
CH <sub>4</sub> (tCO <sub>2</sub> e/year)	1.2778	0.195	0.1646	16.1179
N <sub>2</sub> O (tCO <sub>2</sub> e/year)	3.9312	0.0273	0.5187	0.819
HFCs (tCO <sub>2</sub> e/year)	0	114.4758	0	0
PFCs (tons of CO <sub>2</sub> e/year)	0	0	0	0
SF <sub>6</sub> (tCO <sub>2</sub> e/year)	0	0	0	0
NF <sub>3</sub> (tCO <sub>2</sub> e/year)	0	0	0	0
Category 2 emission (tCO <sub>2</sub> e/year)	5551.6046	1542.3208	433.1061	1080.3016
<b>Total</b>	8,607.3331, 1.5% higher than in the base year			
<b>Base year (2021)</b>	7,937.831 Category 2 (tCO <sub>2</sub> e/year)			
Scope 1+2 emission (tCO <sub>2</sub> e/year)	5735.119	1696.989	450.4104	1123.5177
<b>Total GHG emissions (tCO<sub>2</sub>e/year)</b>	9,006.0361			
<b>Base year (2021)</b>	18,325.4188 Categories 1 and 2 (tCO <sub>2</sub> e/year)			

Total consolidated revenue (unit: NTD thousands)	22,067,242
Intensity of GHG (Scopes 1 and 2) emissions (tCO <sub>2</sub> e/total consolidated revenue (unit: NTD thousands))	0.04%
Base year emission intensity (2021)	0.0010 (tCO <sub>2</sub> e/total consolidated revenue (unit: NTD thousands))

As Chroma ATE Inc was relocated at the end of 2020, the emissions from refrigerant were calculated based on the amount of filled refrigerant. Thus, the Category 1 emissions were much more than the Category 2 emissions. As a result, the 2022 GHG emissions was reduced by 96%.

### 2. Status of other indirect (Categories 3-6) GHG emissions in 2022. In this year, we quantified the emissions of solid waste and liquid waste, as well as the emissions from employee commuting.

	Chroma ATE Inc.	Huaya Plant	Hsinchu Branch	Kaohsiung Branch
Category 3 indirect GHG emissions from transportation	50.2492	0	0	0
3-3 Emissions of employee commuting (bus)	50.2492	0	0	0
<b>Total</b>	50.2492			
Category 4 indirect GHG emissions from products used by organizations	1,005.9845	404.9631	101.917	129.6644
4-3 Waste from operations (5)	1,005.9845	404.9631	101.917	129.6644
<b>Total</b>	1642.529			
Category 5 indirect GHG emissions from the use of products related to organizations	(unquantified)			
Category 6 other indirect emissions	(unquantified)			

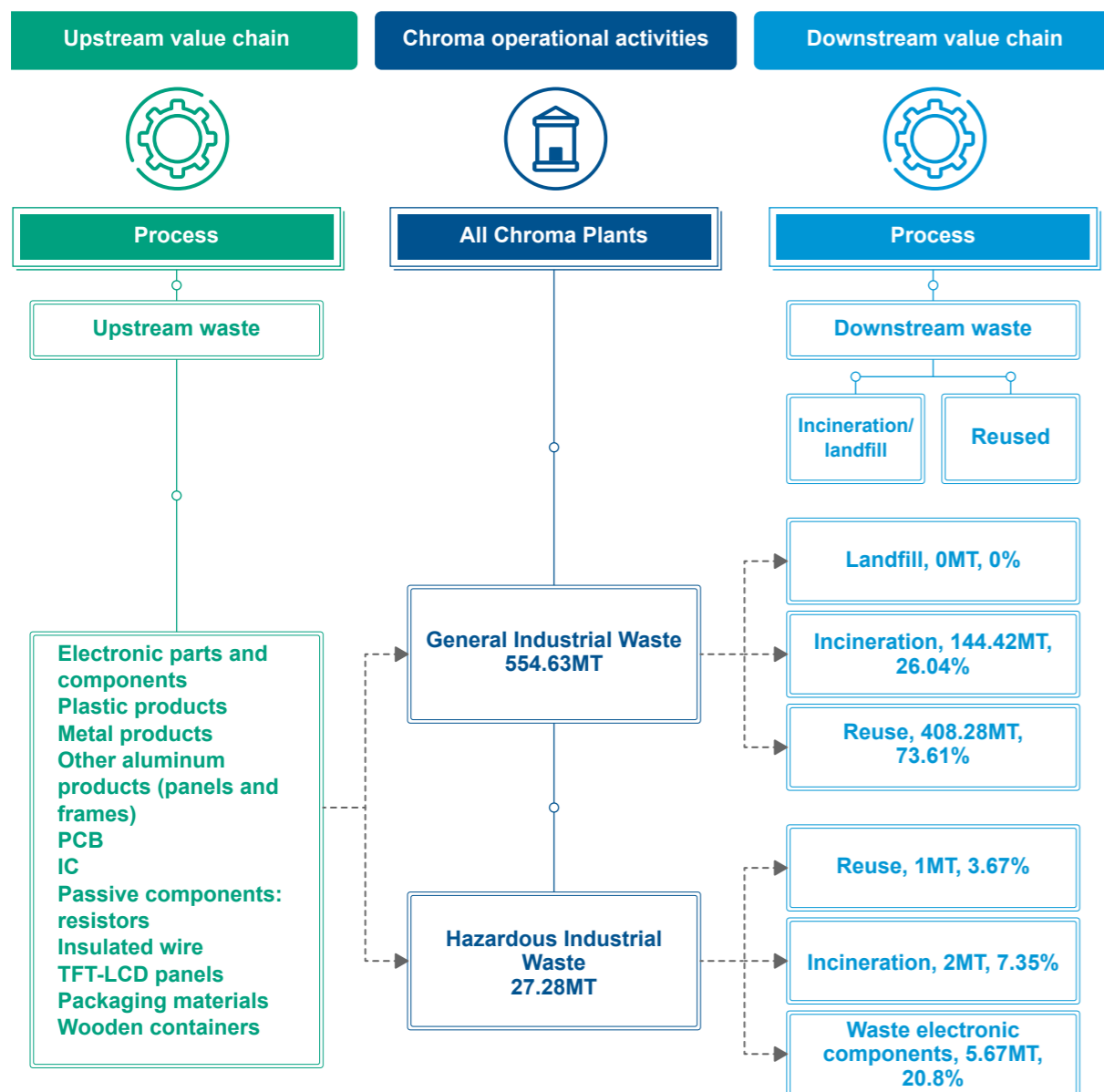
Note 1: Numbers in () refer to the categories for identification and quantification based on the GHG Protocol Scope 3 Evaluator Tool.

4.4.3 Waste management GRI 306-1, GRI 306-2, GRI 306-3, GRI 306-4, GRI 306-5

We implement waste management for all three plants in accordance with the Waste Disposal Act using sorting, waste reduction, carbon reduction, and pollution prevention in full compliance with all local environmental regulations. We also reduce waste production through active sales, reuse, and paid disposal of scrap. Every year we receive third-party (SGS) verification, carry out periodic audits of the ISO 14001 management system and disclose our environmental performance and achievements.

The waste generated from our operations include “general industrial waste” and “hazardous industrial waste”. We hire local contractors to transport waste off the plants for proper disposal in accordance with the local laws and regulations. The weight of each type of waste is measured based on the transportation orders and weighing information. We recycle or arrange other treatments for general industrial waste by category and hazardous industrial waste is detoxified with the appropriate treatment in accordance with the local legal requirements. Additionally, we also promote the “Resource Recycling and Reduction Concept” in all plants to encourage all our employees to reduce waste from the inside out.

Flow of Value Chain Waste in All Chroma Plants



1. General industrial waste

Includes plastics, waste cleaning cloths, paper, metal, aluminum, solder, activated charcoal, employee domestic waste, kitchen leftovers, and waste lighting sources.

Waste Categorization	Headquarters (including the Huaya Plant)			Hsinchu Branch			Kaohsiung Branch			Total of all three plants		
	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Recycling and reuse	263.98	332.38	327.83	3.01	3.45	2.83	70.82	86.58	77.62	337.81	422.41	408.28
Incineration (including energy recovery)	123.16	151.95	122.87	12.00	12.00	12.00	9.35	9.18	9.55	144.51	173.13	144.42
Incineration (excluding energy recovery)	0	0	0	0	0	0	0	0	0	0	0	0
Landfill	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0.01	1.69	0	0	0	27.91	10.56	0.24	0.52	0.15	1.93
<b>Total</b>	<b>387.14</b>	<b>484.34</b>	<b>452.39</b>	<b>15.01</b>	<b>15.45</b>	<b>14.83</b>	<b>108.08</b>	<b>106.32</b>	<b>87.41</b>	<b>482.84</b>	<b>595.69</b>	<b>554.63</b>
											+23.37%	-6.89%

We encourage our employees to save energy and reduce carbon in their daily activities and pass on the concepts of environmental protection and waste reduction to achieve the effective use and the conservation of resources. Our achievements in resource recycling and reuse can also be verified by the steady increase in recycling rate, from 64.35% in 2019, to 69.96% in 2020, and 70.91% in 2021 to 73.61% in 2022.

## 2. Hazardous industrial waste

Waste electronic parts and components, slag and scrap, the PCBs of accessories, dichloro-ethene contaminated or corrosive waste, lead from waste leaded-solder and spatter from lead-free solder and other compounds, chemical mixtures containing chromium trioxide, waste sharp tools, infectious waste, and waste solvents and containers.

Waste categorization (including SASB standards)	Headquarters (including the Huaya Plant)			Hsinchu Branch			Kaohsiung Branch			Total of all three plants		
	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Recycling and reuse	0.72	1.05	1	0	0	0	0	0	0	0.72	1.05	1
Incineration (including energy recovery)	2.44	2.19	1.53	0	0	0	0	0.19	0.13	2.44	2.38	1.66
Incineration (excluding energy recovery)	0.4	0.3	0.34	0	0	0	0	0	0	0.4	0.3	0.34
Buried	0	0	0	0	0	0	0	0	0	0	0	0
RT-CH-150a.1. (waste electronic parts and components)	2.81	6.37	5.56	0	0	0.09	0.12	0.14	0.03	2.93	6.51	5.67
Others	3.92	6.07	18.15	0	0	0.11	0.16	0.32	0.34	4.08	6.39	18.59
<b>Total</b>	<b>10.29</b>	<b>15.98</b>	<b>26.58</b>	<b>0</b>	<b>0</b>	<b>0.2</b>	<b>0.28</b>	<b>0.65</b>	<b>0.5</b>	<b>10.57</b>	<b>16.63</b>	<b>27.27</b>

Total weight of waste ton by 2020-2022 (including general industrial waste and hazardous industrial waste).

	2020	2021	2022
Headquarters (including the Huaya Plant)	397.43	500.32	478.96
Hsinchu Branch	15.01	15.45	15.03
Kaohsiung Branch	80.98	96.55	87.91
<b>Total</b>	<b>493.42</b>	<b>612.32</b>	<b>581.91</b>

There was no leakage or non-compliance with environmental regulations, non-monetary sanction or fines for non-compliance with environmental laws or regulations in 2022.

**Employee  
Care and Safe  
Workplace**



We offer multifaceted learning resources to provide our employees with all the required work competencies. We have also established a complete competency improvement system for global talent that has become a market benchmark. We value the health and safety of our workers and continue to ensure a safe and healthy workplace.

Aspect	Social (S)	
Material topic	Talent development and education and training, employment, occupational health and safety management.	
Management Mechanism	<ol style="list-style-type: none"> <li>1. Follow the Talent Quality-Management System (TTQS) and coordinate with the existing well-established education and training development system and e-learning platform.</li> <li>2. Manage remuneration and benefits based on the corporate/personal annual target achievements, the remuneration policy, and internal/external salary assessments.</li> <li>3. Review and coordinate matters relating to occupational health and safety through the ISO 45001 occupational health and safety management (OH&amp;S) systems and establish the Occupational Health and safety (OSH) Committee.</li> </ol>	
Commitments and Policies	<ol style="list-style-type: none"> <li>1. We value employee health and safety and consider this to be a most important issue.</li> <li>2. Follow the labor health and safety requirements to continuously improve the workplace environment and prevent industrial safe incidents to lower occupational safety risk.</li> <li>3. Implement the ISO 45001 : 2018 Occupational health and safety management systems</li> <li>4. TTQS has been set as a benchmark for training quality and has been combined with corporate vision, goals, and strategies to build a training system for multidimensional development to enhance workforce quality and competitiveness.</li> <li>5. Share the fruit of successful business operations with all employees in accordance with the Education and Training Management SOP, Regulations for Management of Internal Instructor Training and Appointment, and a performance-linked reward system.</li> <li>6. Draw up a well-designed and attractive remuneration policy.</li> </ol>	
The mechanism and Outcome of Assessment in 2022	<ol style="list-style-type: none"> <li>1. Periodic external verification.</li> <li>2. Internal audit.</li> </ol>	<ol style="list-style-type: none"> <li>1. Occupational accident rate in 2022: 0.27%.</li> <li>2. Workplace monitoring non-conformance in 2022 was zero.</li> <li>3. Average hours of training per employee in 2022: 10.34 hrs.</li> </ol>
Medium-term and Long-term Goals	<ol style="list-style-type: none"> <li>1. We continue a professional and multifaceted education and training program to enhance workforce quality and corporate competitiveness.</li> <li>2. Digital transformation courses (classroom) account for over 50% of all courses.</li> <li>3. The remuneration system has been optimized to uphold the principle of "equal pay for equal work and pay according to ability".</li> <li>4. We review the level of various salary items regularly and Provide employees with incentive remuneration</li> <li>5. Zero severe accidents.</li> <li>6. Zero fines and penalties</li> </ol>	
Resources/Actions/Grievance Mechanisms	Human Resources Division, Health and safety Center	



5.1

Composition of Employees

5.1.1 Status of staff employment GRI 202-2, GRI 405-1

Chroma regards our employees as a key company asset. We ensure diversity and inclusion and our employee recruitment policy is to offer equal opportunities to all. We are in line with human rights in constitution and gender equality prescribed by the Act of Gender Equality in Employment. We do not allow any discrimination based on language, attitude or behavior, race, socio-economic status, age, marital status, family status, language, religion, political affiliation, nationality, physical appearance or physical or mental disability. Chroma had a total of 1,964 employees on its payroll at the end of 2022. The electronics sector, to which our company belongs, is strongly oriented towards R&D and technology and our employee profile shows a significant discrepancy in terms of the male to female ratio. Male employees totaled 1,519 (77.34%) against 445 females (22.66%). The average age of our employees is 38.15 years, with average work seniority of 7.93 years. All these are full-time employees.

We have endeavored to hire and retain outstanding management talent. Our senior management includes divisional VPs and high-ranking supervisors, BU presidents, the VPs of various centers and the President of the Company. All of our senior managers are native citizens of the Republic of China (Taiwan) and the senior management-level personnel (21) makes up 1.07% of the total.

Our workforce is diverse and in addition to native citizens of Taiwan (ROC), we have workers from the Philippines, Vietnam, Malaysia, the Netherlands and South Korea. This is a clear demonstration of a diversified workforce. The foreign workers are entitled to all the benefits and perks enjoyed by native workers, regardless of nationality. In support of the government policy that ensures employment opportunities for people with disabilities and to promote an innovative and friendly workplace, we hired 11 employees with disabilities (7 with severe disabilities) in 2022. They have been assigned to departments where they can fully leverage their talent and contribute to society in their own ways. We will continue to evaluate and assess positions that may be suitable for people with disabilities to provide more such employment opportunities.



		2022			
		1,964			
		Male	Percentage	Female	Percentage
<b>Statistics on the number of employees</b>					
<b>Total number of employees</b>		1,519	77.34%	445	22.66%
<b>Age distribution</b>	Under 30 years of age	304	20.01%	108	24.27%
	Between 30 and 50 years of age	1,069	70.38%	278	62.47%
	Over 50 years of age	146	9.61%	59	13.26%
<b>Employee diversity</b>	Republic of China (Taiwan)	1,229	80.91%	371	83.37%
	Philippines	281	18.50%	40	8.99%
	Vietnam	6	0.39%	34	7.64%
	Malaysia	1	0.07%	0	0.00%
	The Netherlands	1	0.07%	0	0.00%
	India	0	0.00%	0	0.00%
	South Korea	1	0.07%	0	0.00%
<b>Disadvantaged minorities (number of employees with disabilities)</b>		9	0.59%	2	0.45%
<b>Direct/Indirect</b>	Indirect Labor	1,220	80.32%	364	81.80%
	Direct Labor	299	19.68%	81	18.20%
<b>by contract term</b>	permanent employee	1,513	99.61%	445	99.78%
	Regular	6	0.39%	1	0.22%
<b>by job nature</b>	Full-time	1,514	99.67%	444	99.78%
	Part-time (partial working hours)	5	0.33%	1	0.22%

The existing workforce in the company includes people in managerial, R&D, technical, sales, and administrative and staffing positions. To recruit talented individuals from different areas of specialization and set career development for employees, we planned the "career hierarchy system" in 2019 which was introduced on January 1, 2021. In this system jobs are divided into seven categories: management, R&D, engineering, product management, sales, professional, production, and management. This allows professional career development in a specific direction. By the end of 2022, the number of management personnel was 235, slightly less than in the previous year, and accounting for 11.97% of the total workforce.

By December 31, 2022, the number of employees in each area was as follows:

Career field	Male	Percentage	Female	Percentage
Management field	202	13.30%	33	7.42%
R&D field	506	33.31%	43	9.66%
Engineering field	341	22.45%	65	14.61%
Product management field	28	1.84%	7	1.57%
Sales field	69	4.54%	10	2.25%
Professional field	55	3.62%	171	38.43%
Production and operation field	318	20.93%	116	26.07%

### 5.1.2 Structure of New Employees and Employee Turnover GRI 401- 1

Chroma has been actively recruiting new employees and our application selection process is strictly compliant with the Employment Service Act. We search for the most suitable candidates using a fair and open recruitment channel. Evaluation is based upon competence and unique strength without any discrimination due to race, gender, religion, nationality, political affiliation, sexual orientation or age.

We insist on the nurture of outstanding talent. In 2022, 328 new employees were hired, with a new employment rate of 16.71%. Close to 50% of them were fresh graduates. We hope that Chroma's overall efficiency and image can be improved by hiring more young, competent and talented people, leading to higher profit and sustainable operation.



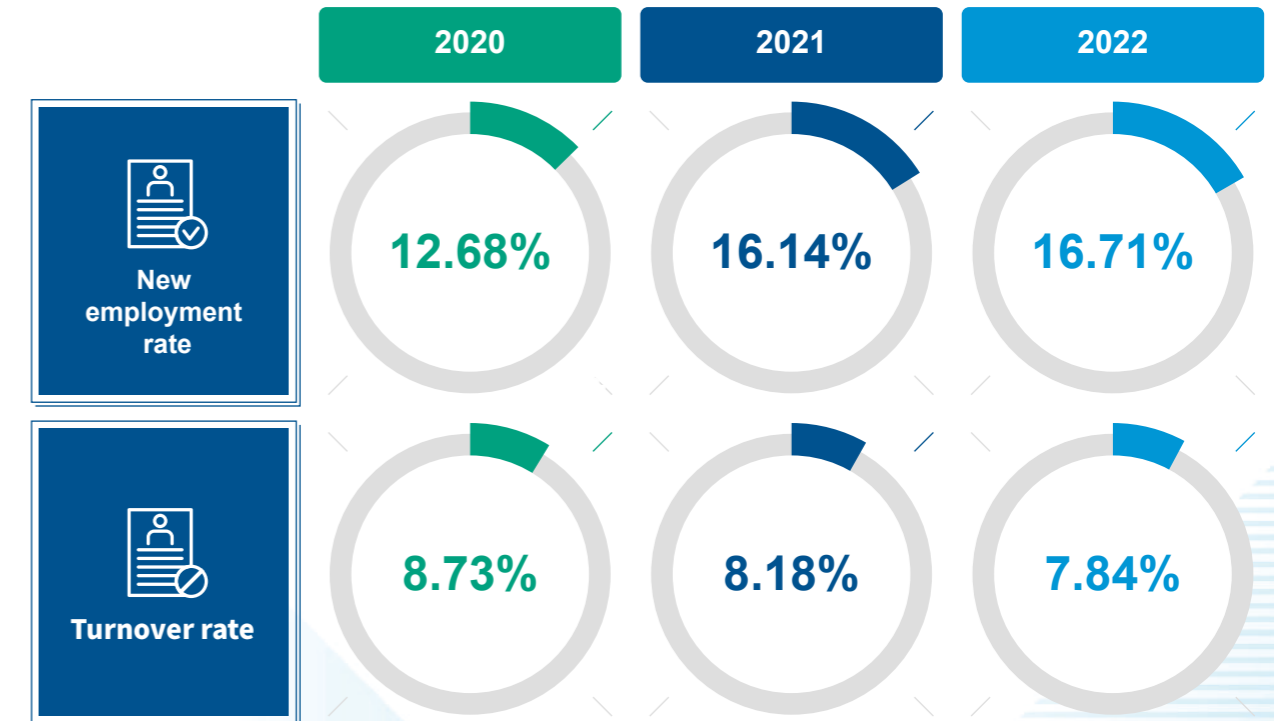
1. Breakdown of new employees and employees who left

		Number	Rate by the End of Year
<b>Total number of employees for the current year</b>		1,964	--
<b>Total number of new employees</b>		328	--
<b>Age</b>	<b>Under 30 years of age</b>	175	8.91%
	<b>Between 30 and 50 years of age</b>	151	7.69%
	<b>Over 50 years of age</b>	2	0.10%
<b>Region (nationality)</b>	Republic of China (Taiwan)	190	9.67%
	Philippines	112	5.70%
	Vietnam	24	1.22%
	The Netherlands	1	0.05%
	South Korea	1	0.05%
<b>Gender</b>	<b>Male</b>	249	12.68%
	<b>Female</b>	79	4.02%
<b>Total number of employees who left</b>		225	--
<b>Age</b>	<b>Under 30 years of age</b>	68	3.46%
	<b>Between 30 and 50 years of age</b>	148	7.54%
	<b>Over 50 years of age</b>	9	0.46%
<b>Region (nationality)</b>	Republic of China (Taiwan)	159	8.10%
	Philippines	43	2.19%
	Vietnam	21	1.07%
	The Netherlands	1	0.05%
	India	1	0.05%
<b>Gender</b>	<b>Male</b>	167	8.50%
	<b>Female</b>	58	2.95%

Note 1: The total number of employees is the same as the total number of employees at the end of the year.

Note 2: "New employee" does not include those who have been reinstated after unpaid leave; "Employees who left" does not include those on unpaid leave.

To ensure a steady influx of new blood into the Company while taking external factors such as the current economy into account, it was decided to work towards maintaining a healthy turnover rate of between 5% - 10%. Over the past three years, we have worked hard to keep our annual turnover rate down and the fact that it has been steadily falling during this time reflects our talent retention efforts. A reduction of our employee turnover rate remains an important goal for the year. A reduction of turnover rate not only helps the Company by reducing personnel training costs and other intangible HR costs from unnecessary turnover and severance pay, but also facilitates optimal HR efficacy. This will in turn create more value for our shareholders and pave the way to an environment that will help employees make the most of their talent. A total of 225 employees left the Company in 2022. This figure includes those who retired. Among them, 221 resigned voluntarily; 4 were laid off; 5 who were qualified to retire under the Labor Standards Act and retired voluntarily; 64 were foreigners and 7 were contract personnel. The turnover rate for the year was 7.84%.



Note 1: New employment rate (%) = total number of new employees (excluding reinstated employees)/total employees in the current year × 100

Note 2: Turnover rate (%) = Total number of employees who left minus foreign workers and contract personnel/total employees in the current year × 100



## 5.2 Employee Remuneration and Benefits

### 5.2.1 Employee remuneration GRI 401-2, GRI 2-21

Our offices include those at headquarters, the Huaya Plant, and the Hsinchu and Kaohsiung Branches. Employee salaries are determined by the human resources unit according to market-based salaries and the financial status and organizational structure of the Company. Their overall remuneration is calculated based on individual competency, assigned responsibility, performance, and achievement of the operational goals of the Company. New employees will never receive any kind of differential treatment in terms of salary due to their gender, race, party affiliation, thinking, religion, sexual orientation or marital status. Position, assigned responsibilities, performance and competency are taken into account and the Company "Salary Grade" is used as a basis for their overall remuneration.

Chroma's average salary ratio between male and female employees holding similar positions across different fields and offices is nearly 1:1. However, as Company operations involve technical R&D and intensive technologies, most of our R&D and technical positions are held by men and a good many of our female staff are in administrative positions. This means that despite our attempts to have comparable pay grades, discrepancies still exist, which explains why female employees receive slightly less salary compared to their male colleagues at the same job level. Our basic pay for employees in 2022 is as follows:

Salary (basic pay) for 2022	Headquarters (including the Huaya Plant)			Hsinchu Branch			Kaohsiung Branch		
	Male (number of employees)	Female (number of employees)	Wage ratio - female:male	Male (number of employees)	Female (number of employees)	Wage ratio - female:male	Male (number of employees)	Female (number of employees)	Wage ratio - female:male
Management field	166	26	1:1.23	18	5	1:1.29	18	2	1:0.87
R&D field	425	36	1:1.06	31	4	1:1.05	50	3	1:0.93
Engineering field	274	53	1:1.06	28	3	1:0.94	39	9	1:1.24
Product management field	26	6	1:1.33	1	1	1:2.19	1	0	--
Sales field	61	7	1:1.27	3	0	--	5	3	1:1.13
Professional field	51	149	1:1.07	2	10	1:2.21	2	12	1:1.11
Production and operation field	309	113	1:0.93	0	0	--	9	3	1:1.08

Note: According to our Labor Insurance and NHI agreements, overseas employees are included in the number of HQ employees. In 2022 the ratio of annual total compensation for the highest-paid individuals in the Company to the median annual total compensation for all employees was 19.56.

### 5.2.2 Employee Welfare

Chroma "treats employees like family". It is a matter of utmost concern to Chroma that all employees receive the same proper care and treatment. The Company welfare system meets the needs of employees with food, clothing, accommodation, commuting, education and recreation to allow them to work with us without having to worry about daily needs. We also offer a variety of communication channels to gather information about employee needs to improve our welfare measures. Several recreational, medical and health facilities and services have been provided in our plants for our employees to focus on their work with the aim of "work healthy and live happily". We have made comprehensive efforts in employee care, in the hope that our employees will be able to maintain a balance between hard work and a healthy and happy family life. In full accordance with the law, we provide our employees with labor and health insurance and maternity allowance/unpaid parental leave. A certain percentage of employee wages is taken as contribution to the pension fund (under the new scheme)/reserve funds (under the old scheme). All employees are covered by comprehensive group insurance, and our leave benefits are more favorable than those set down in the Labor Standards Act. The benefits include one-day birthday leave and five days of paid sick leave annually. We want to make sure our employees can work and live safely and find time to relax and rest.

Employee welfare	Description
Bonuses	Overtime pay, holiday bonuses, employee rewards, birthday cash gifts
Leave benefits	Two days off per week, one day of paid birthday leave, five days of paid sick leave annually, paternity leave for prenatal checkup and delivery for male employees, and menstrual leave and maternity leave for female employees.
Insurance	Labor insurance, health insurance, free group insurance for employees, medical check-ups
Food benefits	An employee cafeteria, missed meal allowances for being called out for duty and for working overtime
Clothing	Employee uniforms
Accommodation	An employee dormitory
Commuting benefits	Fare allowances and shuttle buses for commuting to and from work, parking spaces or parking fee allowances.
Recreational benefits	An employee gym, domestic trips, overseas trips, regular gatherings.
Allowances	Marriage allowance, maternity allowance, on-the-job training, company-owned cell phones or cell phone allowance, employee retirement planning (including pensions and post-retirement benefits), funeral allowance for employees and their families.
Others benefits	<p>1.A reasonable salary system: Remuneration reflects employee position of responsibility, performance and competency. There is an annual salary adjustment based on individual performance. Employee salaries are reviewed from time to time to ensure compliance with the salary level on the job market. Remuneration may be provided and shares may be purchased in follow-on offerings.</p> <p>2.Complete welfare measures: Labor insurance, health insurance, group insurance, year-end bonuses, regular medical check-ups, birthday cash gifts, marriage, funeral and maternity allowances, domestic and overseas travel allowances, an employee cafeteria, a recreational center (a swimming pool, SPA, gym, dance studio), an employee dormitory, shuttle buses, a parking lot, movies, employee training, pensions, club activities.</p>

<b>Retirement system</b>	Pursuant to the requirements of the Labor Standards Act, Chroma has established the "Employee Retirement Procedure" and contributes 4% of the employee monthly salaries as their pension reserve to a designated account at the Bank of Taiwan. A Pension Reserve Supervisory Committee has also been established which is responsible for management and supervision of the reserve. Also pursuant to the Labor Pensions Act, the Company has also been contributing 6% of each employee's salary to their personal pension account according to the new pension system. Some employees also choose to voluntarily deposit money into the fund and the Company deducts the amount from their salary and remits it to the personal pension account set up by the Bureau of Labor Insurance.
<b>Service from visually impaired masseurs</b>	Chroma has hired professionally trained and qualified visually impaired masseurs who provide their services on Company premises. Such arrangement not only gives work to a disadvantaged minority group in society, but also allows employees to enjoy relaxing and comfortable massages. As they relax and unwind during the massage, they are also contributing to charity.
<b>Health Credits</b>	We have created a system in which employees are able to earn and collect "health credit points" in an effort to promote physical and mental well-being while also encouraging our employees to be actively involved in health promotional activities. Points are earned by participation in relevant health promotion activities, seminars, screening for four major cancers, physical exercises and competitions etc. Once enough points or credits have been earned they can be redeemed for different rewards.
<b>Chroma Elite Scholarship</b>	<p>1.The "Chroma Elite Scholarship" was established to specifically encourage students to study hard and as commendation for excellent performance in special areas.</p> <p>2.Children of employees (excluding contract employees) of Chroma and its affiliates who meet the following requirements may apply for the Scholarship.</p> <p>(1)Applicant must be an active student of junior high school, senior high (vocational) school, college, or a university.</p> <p>(2)The GPA and conduct mark for both semesters in the academic year 2021 of junior high school applicants must be 80 or more and 85 or more respectively, and there can be no record of minor or major demerit.</p> <p>(3)The GPA and conduct mark for both semesters in academic year 2021 of senior high school applicants must be 80 or more and 85 or more respectively, and there can be no record of minor or major demerit.</p> <p>(4)College and university applicants must have won one of the top three prizes in a national competition or have represented the country in a competition. (Competition period: September 1, 2021- August 31, 2022).</p> <p>(5)Applicants who do not meet the above requirements may file an application if they have achieved outstanding performance in a specific area, such as technology, medicine, fine arts, music, sports, and language, preferably having received a top prize or special honor in a competition in a related area. Applicants need to submit support documents, such as certificates, an award of honor, publications, photos, or videos.</p> <p>(6)Retroactive scholarship: A first-year university student may make an application based on their third-year performance at high-school.</p> <p>(7)A total of 45 students won scholarships in 2022.</p>

**5.2.3 Unpaid Parental Leave GRI 401-3**

We encourage our female employees to breastfeed their babies after birth. In our building, there are lactation rooms with refrigerators for the storage of breast milk and stringent access control. By providing such exclusive space for our female employees, we make them feel comfortable and protect their privacy and safety while enabling them to place equal emphasis on both family and work. An employee who has been in their job for at least six (6) months may, in accordance with the "Act of Gender Equality in Employment" and "Regulations for Implementing Unpaid Parental Leave for Raising Children", apply for unpaid parental leave before their child reaches the age of three. The leave shall be no more than two (2) years in extent. The Company arranges employees to return to their original unit and position after the unpaid parental leave has expired. A total of 13 employees applied for unpaid parental leave in 2022. Their average reinstatement rate was 75%, with an 85.71% retention rate.

	Male	Female	Total
Number of employees eligible for unpaid parental leave in 2022.	175	49	224
Number of employees applying for unpaid parental leave in 2022 (Includes the number of employees who had applied in the previous year and are still on unpaid parental leave)	4	9	13
The number of employees who were granted unpaid parental leave and should be reinstated in 2022	3	9	12
The number of employees actually reinstated in 2022 (The number of employees who were granted unpaid parental leave and reinstated in 2022)	3	6	9
(The number of employees who were granted unpaid parental leave and reinstated in 2021)	2	5	7
The number of employees reinstated after parental leave in 2021 that had stayed in their jobs for one year (The number of employees who returned to work from unpaid parental leave in 2021 and had stayed in their jobs for more than 12 months until 12/31/2022)	1	5	6
Reinstatement rate	100%	66.67%	75%
Retention rate	50%	100%	85.71%

Reinstatement rate = (Number of employees actually reinstated after unpaid parental leave in 2022/Number of employees to be reinstated after unpaid parental leave in 2022) x 100%  
 Retention rate = (Number of employees in 2021 who are still working after reinstatement of 12 months /Number of employees actually reinstated in 2021) x 100%



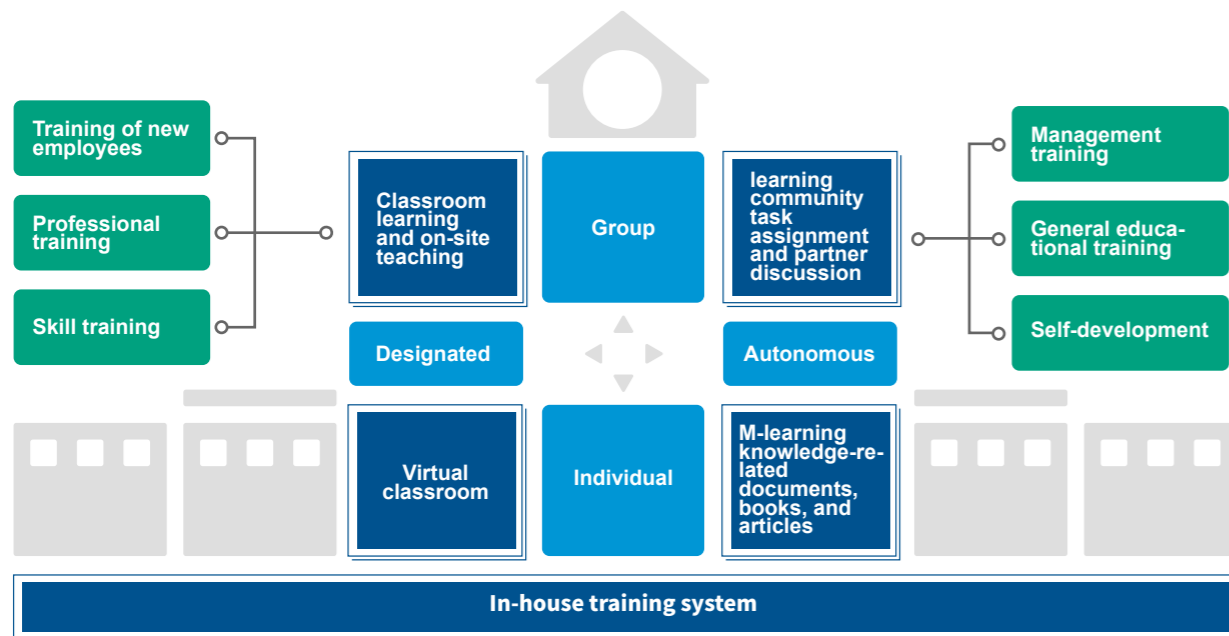
## 5.3

## Talent Development, Education and Training

## 5.3.1 Employee Training and Education GRI-404-1

We take employee development very seriously and perceive the cultivation and development of talented individuals as a real competitive edge. As such, we have planned a fully comprehensive system for education and training and have developed relevant training programs and courses designed to help employees boost their vocational skills, management capacity and achieve self-development. Chroma has therefore built a comprehensive system for training and education and established an "Education and Training Management Procedure" as the basis for all the education and training courses that are offered each year. Our training plans are proposed in accordance with the needs of each department and regular enhancements and improvements are made to the training system each year that continue to boost employee competency.

In response to the advent of the post-COVID era in 2022, in addition to the strengthening the dual-track career path from an original professional position, to one in management, or education and training, was implemented in a more diversified way. This gives talented professionals in various fields access to more comprehensive and effective resources.



## 1. New employee orientation courses

New employees all attend general courses that include: an introduction to the Company, the concept of business operations, ethical standards, labor and human rights laws, rules and regulations, the quality, documentation, environmental and safety systems and labor safety and health in accordance with the law, as well as the social responsibility management system. There are also professional courses in the divisions. In addition, all new employees in the PM, Sales and R&D, which are all directly related to products, will take a three-day "training course for new staff members". Contents of the courses cover the Chroma product lines in full, R&D and manufacturing processes, quality control and verification etc, to help new employees familiarize themselves with the Company and become acclimatized as quickly as possible. This allows them to contribute what they bring to the Company in the shortest possible time.

## 2. Internal training

The online e-training (iLearning) platform offers a complete range of courses related to professional knowledge and skills to all employees. Chroma has assigned the task of developing the e-training platform to the HR and IT units. This platform, which belongs exclusively to Chroma, has a wide and rich selection of training courses that include: management, marketing, R&D, technical, general, orientation and many others. All employees can browse and sign up for the online courses which allow them to learn in a most convenient and versatile way.

Each unit submits a training plan based on their needs so that the unit supervisor and HR unit can plan relevant OTJ training and internal education and training courses. In 2022, there were 500 internal training sessions held and 10,641 people completed a total of 18,145 hours of training. This was 5526.5 hours fewer than the previous year due to the pandemic.

**愛學習 LEARNING**

課程領域: (全部) 上課日期: 2020年1月1日 ~ 2020年12月31日 搜尋課程/講師

全部	營運管理 中心	總經理室 行管中心	聯合製造 中心	創新技術 研發中心	整合系統 事業部	IMS 事業部	半導體測試 設備事業部	量測儀器 事業部	光學檢測 系統事業部
課程總表									
- 管理課程									
- 行銷課程									
- 研發課程									
- 技術課程									
- 共通課程									
- 新人課程									
開班授課									
藏書閣									
訓練履歷									
系統管理									
待評進課程數 0									
總成效評核 237									

3. External training

The bulk of our external education and training has been arranged to strengthen employee competence and facilitate legal compliance. Competency training includes marketing and sales, while legal training includes topics such as fire safety, the environment, and safety and health. Each BU can arrange for employees to attend external seminars and lectures based on specific need or skill requirements for their positions. The employees will learn about the latest trends, to the benefit of Company growth, and Chroma will have enough talented people with professional skills to meet the development needs and achieve sustainable operation. In 2022, 182 employees participated in 253 external training activities for a total of 2,968 hours. The total number training hours increased by 1,348 hours over 2021 because of diversification implemented at the start of the post-COVID era in 2022.

Employee category	Course category	2021(Unit: hours)			2022(Unit: hours)		
		Male	Female	Average	Male	Female	Average
New employees	Fire safety and EHS, as well as orientation training	3.70	3.19	3.30	3.19	3.91	3.32
Internal training	Legal dissemination courses, entry-level manager course	7.80	3.37	6.79	10.09	6.33	9.24
External training	Sales and marketing, innovative knowledge, professional skills, fire safety and EHS courses.	0.85	0.94	0.87	1.61	1.19	1.51
		153 persons / 1620 hours			182 persons / 2968 hours		

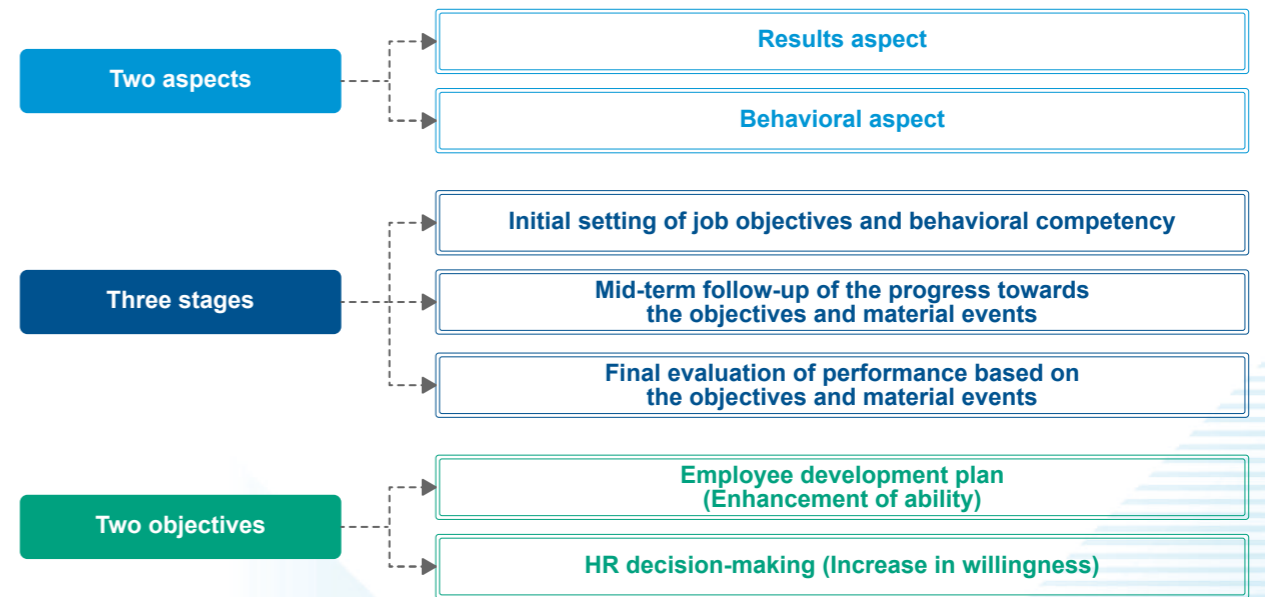
The following table shows the average hours of training for employees in the management and non-management fields in 2022:

Year	2022	
Gender	Male	Female
Average training hours for the management field (hours)	15.86	8.79
Average hours of training for non-management fields (hours)	11.06	7.42

5.3.2 Performance Management GRI 404-3

Chroma uses a system for performance evaluation that involves Management by Objectives to ensure a fair and reasonable procedure for performance evaluation. The system is used to evaluate employee work performance. Outcome of the evaluation serves as a basis for considerations such as appointment to a specific position, promotion, increments, training, career development etc. The main goal of performance evaluation is improvement of overall employee performance and contribution to the fulfillment of the Chroma operational plans. The focus of the objective-oriented management system is as follows:

- Two aspects: results and behavior.
- Three stages: initial setting, mid-term review and final evaluation.(The performance appraisals take place twice a year.)
- Two objectives: both of these, employee development and human resources policies, are designed to facilitate superior-subordinate communication and organizational feedback.



Given that work objectives and goals are more difficult to assess and define for direct personnel and street-level administrative staff, Chroma has retained its original job performance evaluation system that examines employee performance for specific work items in conjunction with an objective-oriented system. Criteria for job performance evaluation include: work quality, work efficiency, work competency and service spirit.

The results of evaluation by the performance management system are incorporated into the promotion management and the reward/remuneration systems to ensure the evaluation of employee performance serves as a proper basis for human resources. With the exception of the managers of business units and staff at high level, local employees are required to undergo performance evaluation after a three-month probationary period. In 2022, 1,546 employees underwent performance evaluation and 89% underwent objective-oriented performance evaluation and 11% underwent job performance evaluation.

Number of employees who underwent performance evaluation (2022)	Job performance evaluation				Objective-oriented performance evaluation			
	Male		Female		Male		Female	
	Number of employees	Percentage (%)	Number of employees	Percentage (%)	Number of employees	Percentage (%)	Number of employees	Percentage (%)
Management field	0	0	1	0.44%	197	85.46%	32	14.10%
R&D field	15	2.86%	3	0.57%	470	89.69%	36	6.87%
Engineering field	37	9.37%	6	1.52%	295	74.68%	57	14.43%
Product management field Sales field	1	3.03%	0	0%	25	75.76%	7	21.21%
Sales field	5	6.49%	2	2.60%	62	80.52%	8	10.39%
Professional field	7	3.17%	37	16.74%	46	20.81%	131	59.28%
Production and operation field	14	20.29%	39	56.52%	13	18.84%	3	4.35%
<b>Total</b>	<b>88</b>	<b>5.11%</b>	<b>79</b>	<b>5.69%</b>	<b>1105</b>	<b>71.47%</b>	<b>274</b>	<b>17.72%</b>

Remarks:  
 1. Job performance evaluation: Employees who fall under Career Level C0, E0 or W1~W4 and new employees who fall under other career levels and report to work after July and before September.  
 2. Objective-oriented performance evaluation: Others.



5.4

Employee Communication and Care GRI 403-4, GRI 2-30

Chroma takes all employee benefits very seriously and we make an effort to maintain a harmonious and positive labor-management relationship. In addition to complying with the Labor Standards Act and all the other pertinent regulations, we also provide benefits and perks that are better than those legally required. On top of that, we endeavor to boost the efficiency of internal communication and encourage our employees to provide feedback. In addition to regular internal communication at meetings in different departments, we have also established communication channels that foster a better relationship with our employees. They have access to the following channels to send messages and express opinions:

1. "Employee Hotline": ext. 19580, landline (03) 327-9580
2. "Employee Email": hr19580@chroma.com.tw
3. "Employee Suggestion Box" allows the Company to gather feedback from the employees and avoid unnecessary labor disputes.
4. "Management Procedure for the Prevention of Unlawful Infringement in the Performance of Duties": The Human Resources Division serves as the responsible unit for review and handling. In 2022 we received three complaints through the internal grievance channels. We accepted them, interviewed the complainants, and closed the cases in accordance with the internal grievance process. We also offer follow-up care to complainants. No human rights complaints were received via the formal external grievance channels throughout the year.
5. "Management Procedure for Prevention Measures, Complaints and Punishments for Sexual Harassment in the Workplace": The Human Resources Division serves as the responsible unit for accepting complaints, investigation and review. There were no grievances filed through the internal or external grievance channels in 2022.

Chroma currently has no established a labor union and therefore has not engaged in any collective bargaining agreements. The benefits and rights of employees are stated in the management regulations of the Company and all labor matters are resolved in quarterly labor-management meetings. Five employee and five employer representatives attend labor-management meetings where mutual and adequate communication has been established. (GRI 2-30)

\*Compliance

Pecuniary Punishment in the Labor Category

There were no fines for non-compliance with labor regulations or the violation of human rights in 2022.



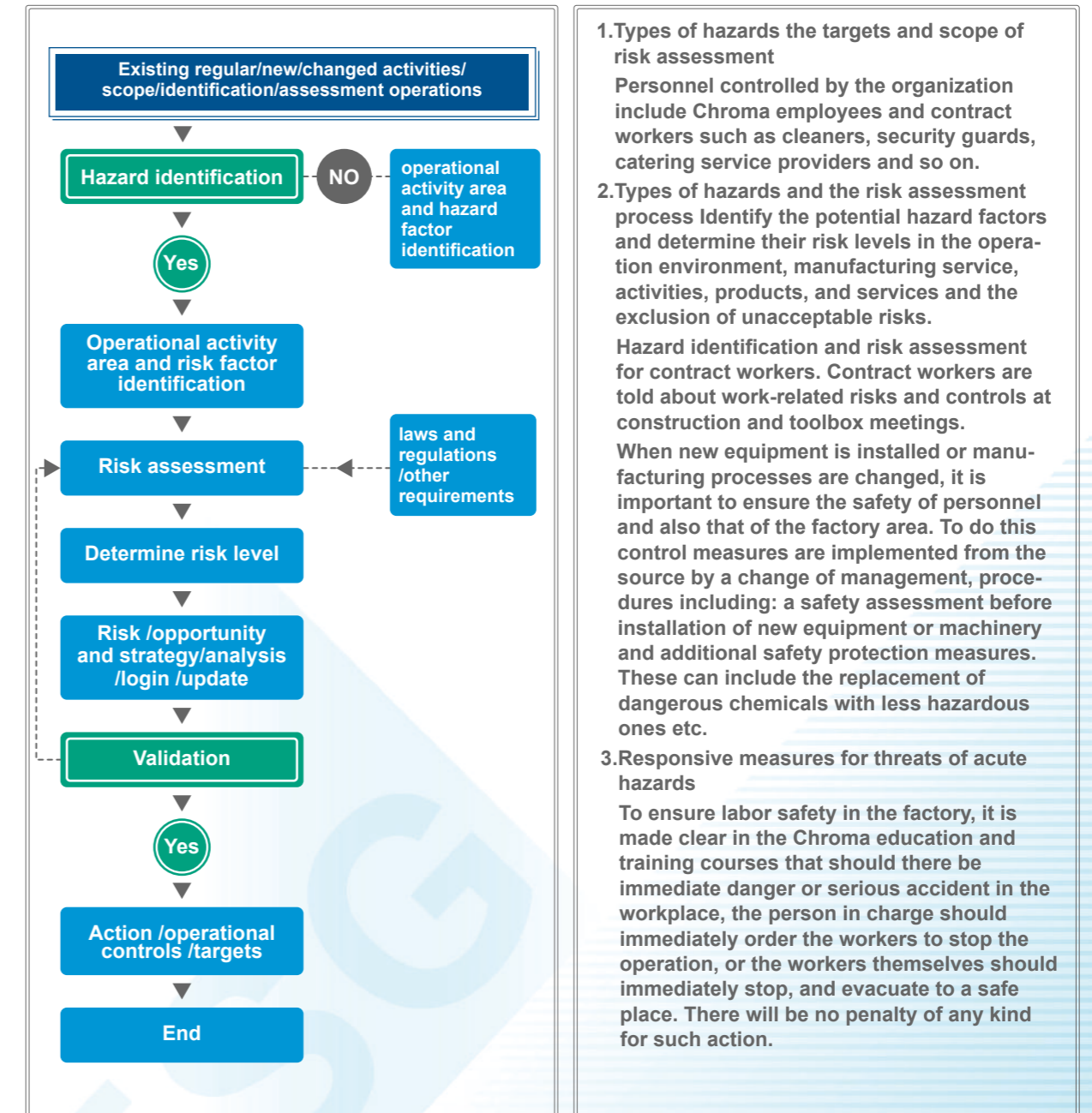
## 5.5

## Occupational Health and Safety GRI 403-1

The provision of a safe and healthy employee workplace environment is one of the fundamental obligations of Chroma as a corporate citizen. At HQ (including Huaya Plant), Hsinchu Branch, and Kaohsiung Branch, we systemically implement occupational safety and management based on the plan-do-check-act (PDCA) cycle of the ISO 45001 OH&S management system. We have established health and safety units under the regional control of the top management of each plant and have hired professionals who plan, implement, supervise, and audit health and safety management. Each plant also has an occupational health and safety committee (OSHC) formed by labor-management collaboration in accordance with the local legal requirements. The OHSC holds regular meetings to review, coordinate, and recommend health and safety management. The on-site Health and Safety units have established standard operating procedures (SOPs) for workplace health and safety management. In the education for workplace environment, equipment, and chemical management, we organize education and training activities and arrange drills in the protection of health and safety from time to time. In 2022 we began to implement the ISO 45001 OH&S management systems in HQ, including the Huaya Plant and the Hsinchu and Kaohsiung Branches. The scope of implementation covers all employees and contractors, including workers who are not employees, but whose work is controlled by the organization. We expect to pass third-party verification in 2023.

## 5.5.1 Hazard identification and risk assessment GRI 403-2

We care about the workplace environment and the health and safety of workers. To uphold the spirit of Health and Safety all units carry out a comprehensive hazard identification and risk assessment of Chroma employees, contractors, visitors and others controlled by the organization, using risks levels based on "Regulations for Management of Occupational Hazard Identification and Risk Assessment". Measures are also taken to eliminate unacceptable risks. An employee can also take the initiative and report hazards in the workplace or environment to the Health and Safety unit. This will help implement our goal of zero accidents and zero disasters through the joint efforts of both labor and management.

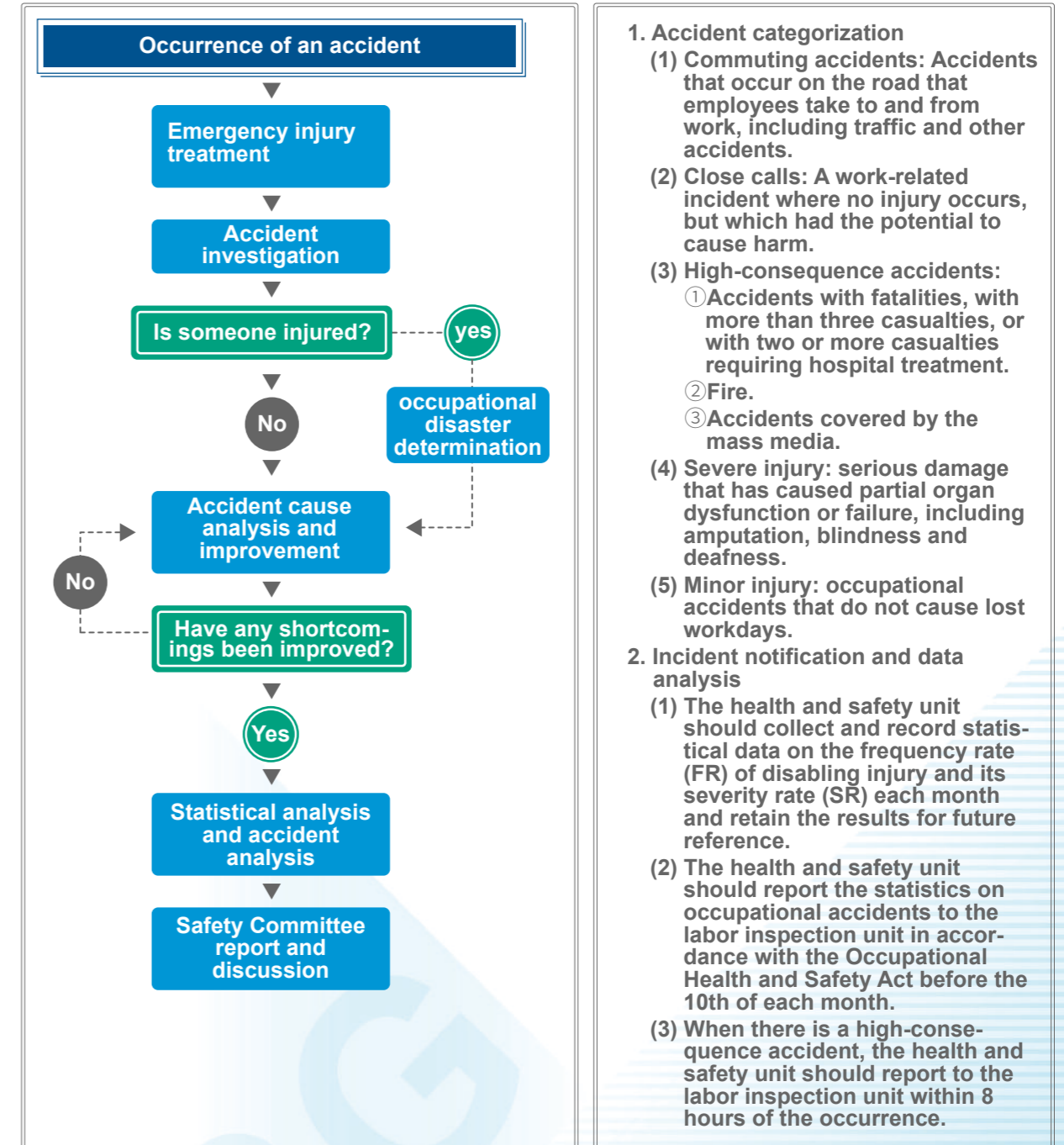


Operation control/action measures (hierarchical control mechanism)

Level/severity of risks and opportunities	Action measures
<b>Class 1</b>	1. Targets and plans for improvement should be established and operations, control procedures, monitoring and measurement requirements should be integrated into the management system. The records of regular inspections should include the effectiveness of control and monitoring and a list of the key improvement to be made. 2. Analyze risks/opportunities and prepare strategic plans.
<b>Class 2</b>	1. Establish monitoring and measurement requirements and review their effectiveness on a regular basis. 2. Analyze risks/opportunities and prepare strategic plans.
<b>Class 3</b>	Accept existing control measures and safety protection devices of operations on a conditional basis. The responsible units can then activate whatever control procedures are necessary.
<b>Class 4</b>	Accept the status quo, no action is required.

5.5.2 Accident Investigation GRI 403-2, GRI 403-9, GRI 403-10

Chroma Accident Handling Flowchart



1. Accident categorization
  - (1) Commuting accidents: Accidents that occur on the road that employees take to and from work, including traffic and other accidents.
  - (2) Close calls: A work-related incident where no injury occurs, but which had the potential to cause harm.
  - (3) High-consequence accidents:
    - ① Accidents with fatalities, with more than three casualties, or with two or more casualties requiring hospital treatment.
    - ② Fire.
    - ③ Accidents covered by the mass media.
  - (4) Severe injury: serious damage that has caused partial organ dysfunction or failure, including amputation, blindness and deafness.
  - (5) Minor injury: occupational accidents that do not cause lost workdays.
2. Incident notification and data analysis
  - (1) The health and safety unit should collect and record statistical data on the frequency rate (FR) of disabling injury and its severity rate (SR) each month and retain the results for future reference.
  - (2) The health and safety unit should report the statistics on occupational accidents to the labor inspection unit in accordance with the Occupational Health and Safety Act before the 10th of each month.
  - (3) When there is a high-consequence accident, the health and safety unit should report to the labor inspection unit within 8 hours of the occurrence.



The statistics of occupational accidents and work-related injuries occurring at HQ and plants during 2020-2022 are tabulated below: GRI 403-9, GRI 403-10, GRI 2-8

Company/Plant	Headquarters (including the Huaya Plant)			Hsinchu Branch			Kaohsiung Branch		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Disabling injury frequency rate (FR) (Number of disabling injury cases/10 <sup>6</sup> working hours)	9.28	7.51	9.60	15.01	0	9.92	2.96	18.67	26.78
Disabling severity rate (SR) (Number of days lost due to a disabling injury/10 <sup>6</sup> working hours)	24.69	38.55	19.59	26.89	0	9.92	2.96	28.01	19.34
Frequency severity index (FSI)	0.48	0.54	0.43	0.64	0	0.31	0.09	0.72	0.72
Number of days lost due to a disabling injury	64	108	57	5	0	2	1	9	7
Number of employees with work-related injury (excluding work-related ill health)	24	21	28	3	0	2	1	6	9
Number of work-related injuries (excluding work-related ill health)	24	21	28	3	0	2	1	6	9
Hours of leave taken (including sick leave, work-related sick leave, and menstrual leave).	130,951	145,293	195,009	12,155	10,533	12,210	16,523	19,409	22,131
Total attendance hours	2,586,697	2,794,955	2,915,647	199,869	179,051	201,590	337,373	321,319	336,021
Absence rate (AR)	0.0482	0.0494	0.0627	0.0573	0.0556	0.0571	0.0467	0.0570	0.0618
Mortality arising from work-related injuries	0	0	0	0	0	0	0	0	0
Number of employees fatalities as a result of work-related ill health.	0	0	0	0	0	0	0	0	0
Number of case of fatalities as a result of work-related ill health.	0	0	0	0	0	0	0	0	0
Occupational disease rate (ODR)	0	0	0	0	0	0	0	0	0

For statistical purposes work-related injuries include commuting incidents and work-related injuries occurring within the factory area.

Company/Plant	Headquarters (including the Huaya Plant)			Hsinchu Branch			Kaohsiung Branch		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Disabling injury frequency rate (FR) (Number of disabling injury cases/10 <sup>6</sup> working hours)	1.93	1.07	0.34	5.00	0	0	0	0	0
Disabling severity rate (SR) (Number of days lost due to a disabling injury/10 <sup>6</sup> working hours)	1.74	1.39	0	10.01	0	0	0	0	0
Frequency severity index (FSI)	0.06	0.04	0	0.22	0	0	0	0	0
Number of days lost due to a disabling injury	5	4	0	2	0	0	0	0	0
Number of employees with work-related injury (excluding work-related ill health)	5	3	1	1	0	0	0	0	0
Number of work-related injuries (excluding work-related ill health)	5	3	1	1	0	0	0	0	0
Hours of leave taken (including sick leave, work-related sick leave, and menstrual leave).	130,951	145,293	195,009	12,155	10,533	12,210	16,523	19,409	22,131
Total attendance hours	2,586,697	2,794,955	2,915,647	199,869	179,051	201,590	337,373	321,319	336,021
Absence rate (AR)	0.0482	0.0494	0.0627	0.0573	0.0556	0.0571	0.0467	0.0570	0.0618
Mortality arising from work-related injuries	0	0	0	0	0	0	0	0	0
Number of employees killed as a result of work-related ill health.	0	0	0	0	0	0	0	0	0
Number of fatalities as a result of work-related ill health.	0	0	0	0	0	0	0	0	0
Occupational disease rate (ODR)	0	0	0	0	0	0	0	0	0

Note: The occupational injuries in the statistics are determined based on the accidents occurring within the plants.

Information regarding the occupational accidents and work-related injuries of workers who are not employees (including a total of 3,968 outsourced laborers or delivery persons in 2022 without significant change over the last year) in 2022

Company/Plant	Headquarters (including the Huaya Plant)	Hsinchu Branch	Kaohsiung Branch
Total number of workers who are not employees.	3,968	12	1,700
Total hours worked by workers who are not employees.	819,448	96	320,032
Disabling injury frequency rate (FR) (Number of disabling injury cases/10 <sup>6</sup> working hours)	0	0	0
Disabling severity rate (SR) (Number of days lost due to a disabling injury/10 <sup>6</sup> working hours)	0	0	0
Frequency severity index (FSI)	0	0	0
Occupational disease rate (ODR)	0	0	0

Method of calculation:

1. Disablement Frequency Rate (FR) = Number of disabling injuries x 106 / total working hours.
2. Disablement Severity Rate SR (SR) = Number of days lost due to a disabling injury x 106 / total working hours.
3. Frequency severity indicator =  $\sqrt{(FR*SR/1000)}$ .
4. Absence rate (AR) = Number of days for sick or personal leave/Total number of working days x 100%
5. Occupational disease rate (ODR) = Total number of employees with occupational disease x 106 / total working hours.

### 5.5.3 Occupational Health and Safety Education GRI 403-5

We abide by the laws and regulations related to occupational safety and health education and training and provide occupational health and safety education and training for new employees and arrange related education and training for in-service employees from time to time. Additionally, education and training are arranged during work time, and no salary or leave will be deducted for participation.









Education and Training	Number of participants	Hours
General safety and health education and training	1537	1.5hours/person (2,305.5 hours in total)
Education and training for workplace violence (bullying)	1547	1.5 hours/person (2,320.5 hours in total)
Educational training on fire control for new employees	201	2 hours/person (402 hours in total)
Fire control and evacuation drills for existing employees	284	1.5 hours/person (426 hours in total)
Educational training for toxic chemicals	20	2 hours/person (40 hours in total)
Education and training for respiratory protection	4	One hour/person (a total of 4 hours)

However, the management of contractor personnel is complicated but unavoidable. While it is necessary to control their entry and exit to the plants, their appreciation of the need for awareness of safety can be a matter of some concern. In addition to the daily educational promulgation at toolbox meetings, first-time visitors and contractors to the plant are informed of the hazards by Center personnel to ensure that they understand the plant regulations.

In addition, when there are different contractors working on the same construction project at the same time and location, agreement needs to be made to ensure cooperation between them and to guarantee that those in charge handle any non-compliance and maintain enough vigilance to ensure proper compliance with the regulations. Although there were no contractor accidents in 2022, we were not satisfied with their overall behavior. We also expect all contractors to maintain a zero occupational accident rate.

### 5.5.4 Prevention and Mitigation of Occupational Health and Safety Impacts Directly Linked by Business Relationships GRI 403-7

To ensure worker and plant safety, autonomous and self-imposed inspections are carried out in addition to those made in accordance with the laws and regulations and Company work standards. Health and Safety Center personnel also conduct routine industrial safety inspection and irregular spot checks on contractor operations and safety. Although we have started implementation of the ISO 45001: 2018 OH&S management systems, we still act on suggestions for improvement after monthly inspections by Occupational Health and Safety Management and from doctors who provide on-site medical services. The results have been good.

Number	Management Policy	Description	Improvement Measure
1	Designated machinery room hazard assessment	No access control notice has been posted for the machine room but the control of personnel entering and leaving has been implemented. Machinery operation regulations or an automatic checklist have not been set up. 	Post access control rules and set operation regulations and autonomous checklist to prevent machinery hazards. 
2	Hazardous chemicals exposure assessment	Laboratory personnel occasionally need to do welding operations. As a result there is some risk of exposure to fumes, spatter, and organic solvents. Some employees did this work without using proper local ventilation facilities causing risk of respiratory track irritation. 	We have removed the desktop welding tool and planned a bud get to purchase local ventilation devices. 
3	Assessment of the protection environment in the field	The material shelves in the storage site have two decks and some metal sheets were stored on the upper shelves. There was a risk from falling metal sheets which could cause injuries. 	Metal sheets storage is now done in a place where there is no threat of similar injury. 
4	Handling and ergonomic analysis	Storage area: Employees may need to handle stacked objects by hand. They may strain muscles, or seriously hurt their backs, when bending down or lifting objects carelessly, or with an incorrect posture. 	Employees need to handle objects frequently. An object that weighs more than 20kg shall be handled by two persons. Health education given to employees shall include instructions about the avoidance of handling objects in a stooping position that may lead to musculoskeletal injury. 

Number	Management Policy	Description	Improvement Measure
5	Laboratory electric shock hazard analysis	There was no protection cover, or partition, installed on the laboratory distribution board as regulated. This presented a danger of electric shock to personnel. 	Partitions are recommended for all distribution boards to prevent the electric shock hazard. 
6	Obstructed escape door	Blocked safety door in the Manufacturing Center. 	Keep safety doors clear at all times. 
7	Blocked emergency ventilation switch	The emergency ventilation switch inside the laboratory was blocked objects. 	Make sure access to the emergency ventilation switch is not obstructed to avoid hindrance to fire-fighting operations in an emergency. 
8	Fire equipment configuration analysis	The fire extinguishers were not placed in the correct locations. 	The fire extinguishers shall be placed in easily accessible areas where they are most likely to be needed. 

### 5.5.5 Worker participation, consultation, and communication GRI 403-4

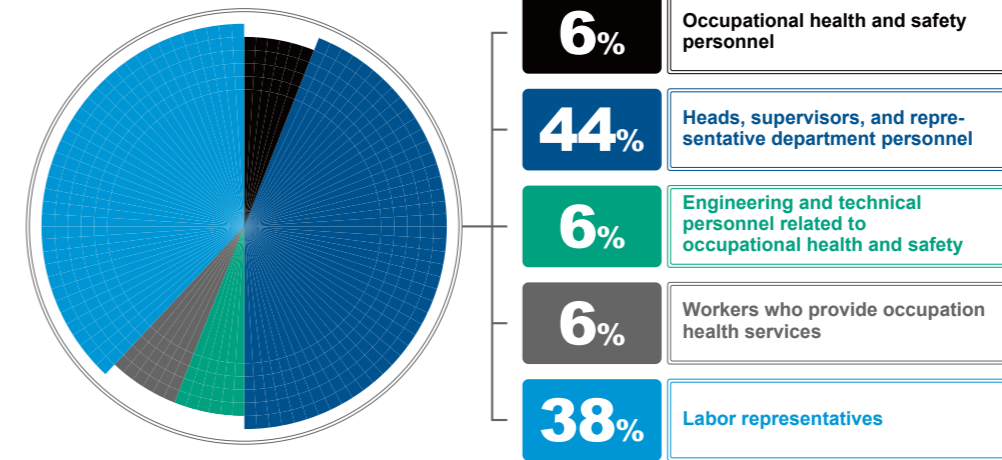
The Company has formulated a "Consultation and Communication Management Procedure". This facilitates the internal agreement on the ESH management system and other management mechanisms. It also establishes commitment and effective two-way communication channels for employees and related external organizations with respect to ESH and the other management mechanisms. Consultation with the workers about safety and health is necessary whenever changes are made to any workplace. The arrangement of the consultation must be documented and meeting notes and minutes should be taken. Stakeholders must also be informed of the changes.

Employees are Chroma's most important asset, and health and safety is a primary employee right. To ensure a healthy and safe working environment for our employees and to implement the safety and health policy, we have set up an Occupational Safety and Health Committee which meets once every three months and has made the following recommendations.

- (1) Occupational health and safety policy.
- (2) Occupational health and safety management plan.
- (3) Safety and health education and training implementation plan.
- (4) Work environment monitoring plan, result and implementation measures.
- (5) Health management, the prevention of work-related illness, and the promotion of health.
- (6) Safety and health proposals
- (7) Business unit's automatic inspection and safety and health audit
- (8) Preventive measures for hazards in machinery, equipment or raw and other material.
- (9) Work-related accident investigation report.
- (10) Check the performance of on-site health and safety management.
- (11) Taking care of the business health and safety management.
- (12) Other matters related to occupational health and safety management.

38% of the total members of the Occupational Health and Safety Committee are labor representatives and the composition is as follows.

- (1) Occupational health and safety personnel
- (2) Heads, supervisors, and representative department personnel.
- (3) Engineering and technical personnel related to occupational health and safety.
- (4) Workers who provide occupation health services.
- (5) Labor representatives.



### 5.5.6 Overall Health Management GRI 403-3

#### 1. Periodic Checkups and a Health Checkup Management System

Chroma carries out health checkups and management for new and current employees (as well as those engaged in special operations with potential exposure to ionizing radiation, lead, MDI, chromic acid, etc) on a regular basis and covers all the relevant costs.

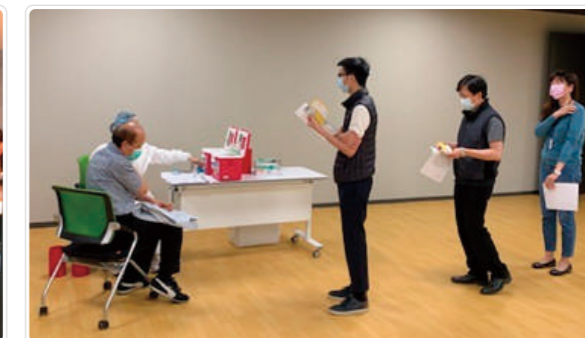
Employee health checkups are arranged every two years. The next one is scheduled for 2023H1. Employees who have been with Chroma for a year or more receive health checkups that are more comprehensive than the statutory senior requirement. In addition to the statutory items, we also add items to the examination that that have been recommended by the in-house occupational medical specialists and factory nurses. These include ultrasonography, bone mass density, and others. Our employees enjoy better health care and benefits than most. In 2022, more than 98% of our employees qualified for the health checkup. In addition to hierarchical employee health management, we arrange appointments and consultations with in-house physicians for employees based on checkup results. We also arrange free registration at contracted base-level clinics for employees requiring medical attention. Chroma also organizes health education and lectures about common health problems and provides employees with convenient healthcare resources to encourage them to seek medical attention and promote health care knowledge.

To protect employee privacy, all records of health checkup data are stored in locked file-cabinets in the physical consultation rooms. Electronic health checkup data is stored in encrypted folders by factory nurses with privilege control.

#### 2. Health Promotion Plans

Employees are the most valuable assets of the Company and helping employees to resist and relieve stress is as important as pursuing high performance. In an environment where high performance and benefit are a first priority, the goals of an organization are set to increase the work performance as well as the satisfaction of the employees, enhance their commitment to the organization, reduce their willingness to quit, and realize a final vision of the organization in sustainable development.

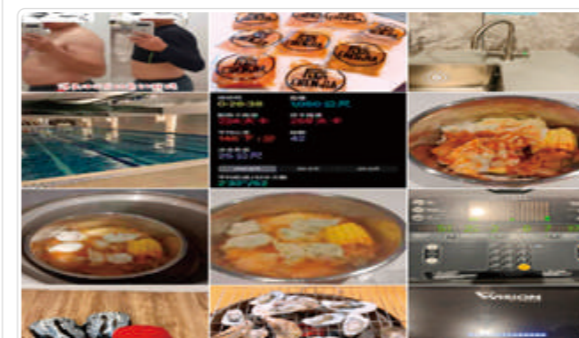
Event date	Event/Name of Seminar	Plant	Number of participants
2022/02/18	COVID-19 vaccination	HQ	116
2022/03/15	Depression prevention meal DIY	Hsinchu	9
2022/03/16	"I Wish you a good night's sleep": how to sleep well	Kaohsiung	26
2022/08/25	Positive concept aromatherapy: Application of aromatherapy in a positive concept for the relief of stress. (including diffuser stone DIY)	Kaohsiung	23
2022/09/01 ~2022/10/31	Health promotion weight loss: Fighting mutated viruses	HQ	103
2022/09/06	Healthy weight loss: Half the effort for double the weight loss with dietary control	HQ	Physical 21 + Virtual
2022/09/22	Intimacy: You and your love life	Kaohsiung	10
2022/10/04	Your body, your best gym	HQ	Physical 36 + Virtual
2022/10/05	Online home exercise	HQ	Virtual
2022/10/19	Gardening Stress Relief DIY	Hsinchu	10
2022/10/20	NHI Cancer Screening (colorectal, breast and cervical cancer)	HQ	71
2022/11/15	Healing a fatigued body, mind, and spirit: Essential Oil DIY	Hsinchu	10
2022/11/15 ~2022/12/22	Leisure Center Xmas Thanksgiving Exercise Point Redemption Lucky Draw	HQ	147
Total	--	--	582



COVID-19 vaccination (HQ)



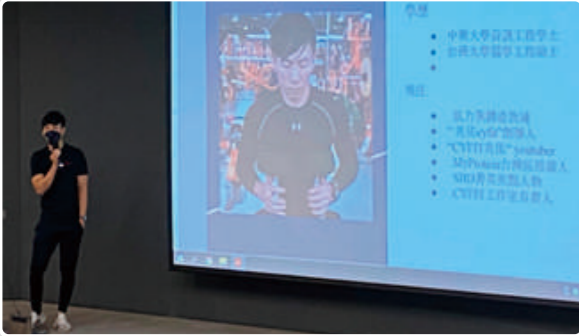
Depression prevention meal DIY (Hsinchu)



Health promotion weight loss: Fighting mutated viruses (HQ)



Dietary Talk: Half the effort for double the weight loss with dietary control (HQ)



Your body, your best gym (HQ)



"I wish you a good sleep": How to sleep well (Kaohsiung)



Cancer Screening: Colorectal, breast and cervical cancer (HQ)



Positive concept aromatherapy: Application of aromatherapy in a positive concept for stress relief (including a diffuser stone DIY) (Kaohsiung)



Healing a fatigued body, mind, and spirit: Essential Oil DIY (Hsinchu)



Intimacy: You and your love life (Kaohsiung)



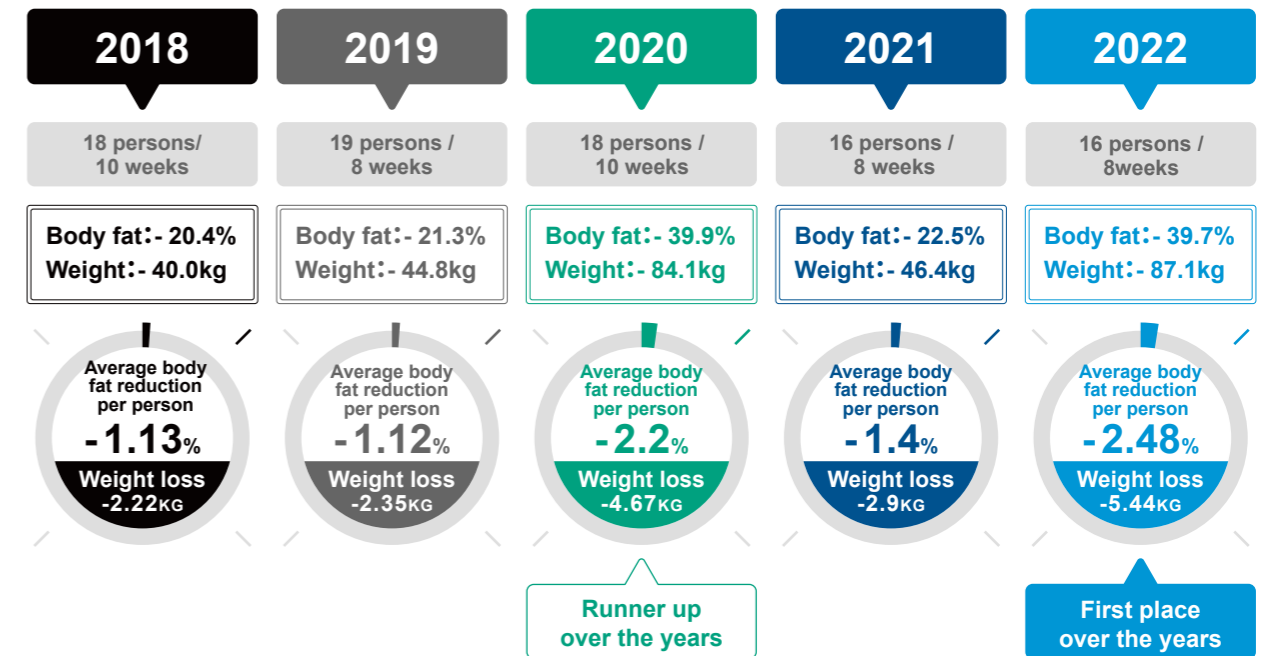
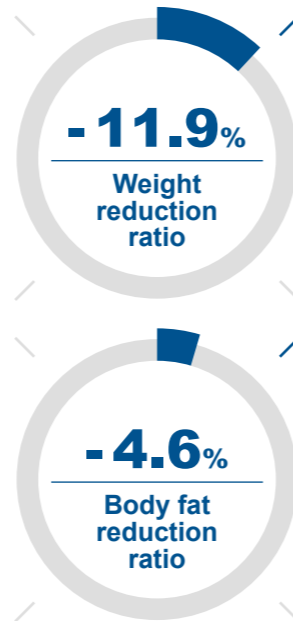
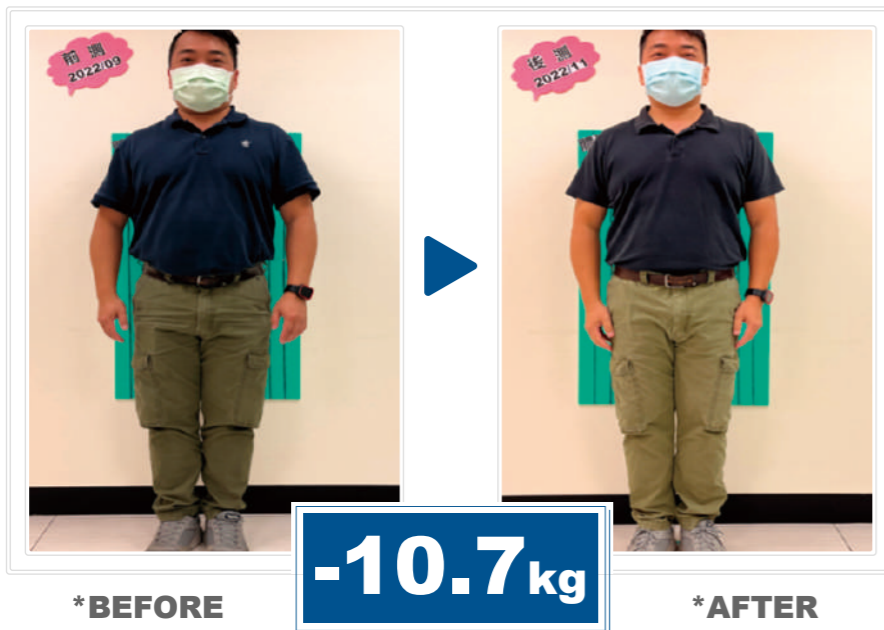
Health promotion and weight reduction activities (Kaohsiung)

The effectiveness of Health Promotion Activities 2018-2022 (Kaohsiung)

2022/09/12~11/06 Health promotion activity-Topic: What can we do during a pandemic? Weight loss.

Complete self-management, a total of 16 participants. Employees on self-imposed health management could join any team for the competition. They were free to choose their preferred weight loss method. In addition to the examination of weight change records, photos taken before and after the competition were compared.

- A. Dietary control only: No exercise intervention, simply dietary control. Employees wrote the "My Daily Diet Journal" (including text and photos).
- B. Exercise only: No limit on the types of exercise. Employees exercised three times a week in sessions of more than 30 minutes each. They made records and notes of each of exercise session.
- C. Mixed: Dietary control and exercise



**Social  
Engagement**





In recent years, our strategy of integrating core business competency with social welfare has resulted in our active engagement in several social welfare activities. Our focused area is to promote science education, climate action, and talent development have finally borne fruit.



## 6.1 Collaborations with Academia

### 6.1.1 We support Formula Student Taiwan (FST) and promote safety in a student formula engineering design competition.

To promote science education, in addition to the sponsoring of FST events, we also provide testing equipment to support the racing teams and inject much-needed safety into the race.

Chroma's wide-ranging electric vehicle (EV) test solution portfolio includes tests for all the high-voltage components used in the vehicle, such as the battery pack, battery management system, DC transformers, onboard chargers, electric vehicle supply equipment (EVSE), the motor drive testing system, and power hardware-in-the-Loop (PHIL) solutions. Our testing solutions cover R&D, product validation and production. We not only support these enthusiastic students by providing the required testing equipment and technical support, but also mediate the early transfer of professional and technical knowhow in the EV industry. The practical aspects of the FST project give engineering students valuable field experience, and the knowledge the students gain about EV engineering will be of great benefit to them in the future.



### 6.1.2 Sponsored student formula teams

In 2018, the Test and Measurement BU began sponsoring the test and measurement equipment needed for the R&D and construction of the new racing cars being built by students in the FST project. We also provided professional technical consultation and some laboratory facilities to give them an edge in the international competition. We sponsored and collaborated with student formula teams from the National Taiwan University (NTU), the National Tsing Hua University (NTHU), the National Taipei University of Technology (Taipei Tech), the National Taiwan University of Science and Technology (Taiwan Tech), the National Chung Hsing University (NCHU), the National Cheng Kung University (NCKU), and the National Pingtung University of Science and Technology (NPUST). Safety is the top priority of EV development and involves all high-voltage parts and components used in EVs, most importantly the battery pack, battery management system, and onboard charger. All these need very thorough testing and validation during design and development. In August 2022, the NTHU formula workshop stepped out of Asia to enter races in Germany and Croatia with their first self-made car. Our German subsidiary Chroma Germany GmbH provided the team with logistic support during the races to enable them to demonstrate their power. Performance was excellent and set an example that we hope will foster future university-industry collaboration in the international EV industry and also allow these less visible Taiwanese champions to gain more prominence.



New Car Presentation at National Taipei University of Technology



Certificate of Appreciation from the National Taipei University of Technology



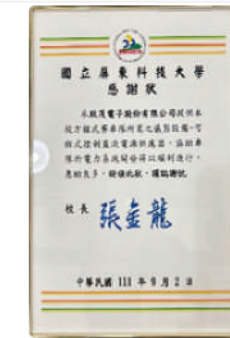
The National Taiwan University Certificate of Appreciation for equipment sponsorship



The National Cheng Kung University Certificate of Appreciation for equipment sponsorship



The National Ching Hwa University Certificate of Appreciation for equipment sponsorship



The National Pingtung University of Science and Technology Certificate of Appreciation for equipment sponsorship.

### 6.1.3 Premier University Plan

The development of the AI and 5G smart technologies has diversified consumer electronics. Taiwan is one of the important supply chains in the international electronics industry, and more talented people are urgently needed in the electrical and electronic fields. Chroma is a leading manufacturer of test instruments and is facing the fact that the global industrial ecology has been changed drastically by the COVID-19 pandemic. Many challenges will need to be overcome in the future and we need to speed up our R&D and enhance the training of talented people for development of the industry.

The Test and Measurement BU is involved in direction and implementation of a Premier University Plan to disseminate practical R&D knowledge in electrical and electronic engineering. We share the latest industry trends through in-depth knowledge exchange with graduate students of the top universities in Taiwan. This facilitates more university-industry collaboration and fosters the practical and technical development of talented individuals that allows an earlier connection between them and the market. In 2022, members of the Premier University Plan committee carried out a tour of nine top universities in Taiwan. Interviews were held with 488 graduate students of the related disciplines, such as electrical engineering and vehicle engineering. The focus was on knowledge exchange and the visits earned recognition and praise from student thesis supervisors.



Department of Electrical Engineering,  
NTHU



Department of Power Mechanical  
Engineering, NTHU



National Changhua University of  
Education



National Taiwan Normal University



National Yunlin University  
of Science and Technology



Department of Vehicle Engineering,  
Taipei Tech

### 6.1.4 The Chroma Elite Scholarship and Chroma Education Scholarship

In the past few years, Chroma has been involved in sector-academia collaborations with many colleges and universities. We offer long-term scholarships which are subsidized by the Chroma R&D Center. We also have made donations of relevant test and measurement equipment to the universities for both education and research. This enables students to keep up with industrial knowledge at an early stage. We hope these efforts will nurture more talent for the sector. We also provide employment opportunities that motivate students to join Chroma immediately after graduation to create a sustainable cycle of sector-academia collaboration.

In 2022 the Chroma Cultural and Educational Foundation introduced the "Chroma Elite Scholarship". Graduates in electronic, electrical, mechanical and chemical engineering, and information technology from colleges and universities in Taiwan are encouraged to apply. In addition to the scholarship, students can also win a two-year employment contract with Chroma. Three students successfully applied for the scholarship in 2022.

In 2022, the Chroma Educational Foundation set up the "Chroma Education Scholarship" specifically for the children of employees of Chroma Electronics and affiliated companies. The aim was to encourage study and to commend those who had demonstrated special expertise. A total of 45 students received the Chroma Education Scholarship in 2022.



The Chroma Elite Scholarship



Chroma Elite Scholarship

### 6.1.5 Industrial Technology Graduate Program

In 2018, to foster university-industry collaboration, we introduced the Electrical Engineering and Electronic Engineering Industrial Technology Graduate Program in collaboration with NCKU. So far, four students have been accepted for the program. Two more opportunities were provided in the Autumn semester of 2022, and we provided two-year scholarships to the Industrial Technology Graduate Program.

We have collaborated with National Taiwan University of Science and Technology since 2013 in the provision of the Electrical Engineering and Electronic Engineering Industrial Technology Graduate Program. So far, 14 students have been accepted for this program. Two more opportunities were provided in the Autumn semester of 2022, and we provided two-year scholarships to the Industrial Technology Graduate Program.

We also collaborate with colleges and universities in mandatory or elective internship programs. In 2022 we provided two internship opportunities to student from the Ming Chi University of Technology and Lunghwa University of Science and Technology.

### 6.1.6 2022 The 1st Chroma Precision Machinery and Measurement Technology Paper Award.

Chroma actively develops comprehensive measurement and intelligent automation solutions for emerging technologies. We encourage outstanding talented individuals, as well as young students, to devote themselves to the R&D of precision engineering and innovative applications in the precision measurement field. To cultivate this talent, and to strengthen the collaboration between industry, the government, academia, and research institutes, as well as stimulate the innovation of precision machinery and measurement technologies, we organized the first Chroma Precision Machinery and Measurement Technology Paper Award in August 2021.

The topics for paper solicitation covered test and measurement technology for key components in clean technology, test and measurement technology for semiconductor components or advanced processes, precision machinery and control technology, test and measurement technology for applied optics and imaging, the application of machine learning to precision test and measurement or control technology, 5G/AIoT test and measurement technology, and quantum computer test and measurement technology. There were 55 papers submitted, and 26 judges from industry, the government, academia, and research institutions spent seven months to determine the best 28 papers. Fifteen awards were presented at the award ceremony on March 17, 2022: one gold, two silver and three bronze, as well as nine honorable mentions. Prize money amounted to a total of NTD\$800,000.

While the papers were being reviewed, Chroma held a seminar on the application of precision electronic measurement in emerging technologies. Teachers and students from many different colleges and universities attended. The technical director of Chroma personally shared several applications in emerging technology to promote more industry-university cooperation and provide the opportunity for future professionals to connect with the job market. We also set up recruitment booths at the award venue to encourage young students to join Chroma.



Chroma Chairman Leo Huang and winners of the 1st Chroma Precision Machinery and Measurement Technology Paper Award



Chroma officers at the 1st Chroma Precision Machinery and Measurement Technology Paper Award



Evening banquet of the Chroma Precision Machinery and Measurement Technology Paper Award



Speakers at the seminar



## 6.2

### Social welfare and engagement

#### 6.2.1 Fun & Love with the Chroma Charitable Donation Campaign

We collaborated with the eslite Foundation and Step30 International Ministries, in the reuse of resources and the spread of love and good-will to Taiwanese schoolchildren and those in remote areas of Africa by the donation of usable materials to those in need. The event was organized by the Chroma Charity Club and Safety and Health Center and supported by Chroma (including Chroma ATE and affiliates ADIVIC and DynaScan), and attracted 213 participants. There were 1,673 items collected (1,188 books and 485 pairs of shoes).



We collected 1,673 items, 1,188 used books and 485 pairs of used shoes.

#### 6.2.2 Taiwan Railways of Popular Science

In 2022 we were co-organizers of the Science Train Tour run by the National Science and Technology Council (NSTC) and Taiwan Railways Administration, MOTC. The train left the Banqiao Railway Station in New Taipei City on October 24, and traveled to 20 stations across 16 counties and cities. On this round-the-island science journey, 250 different science experiments, each connected with featured science activities in counties and cities in Taiwan, were carried out. We joined the event at Taoyuan Railway Station where we had set up booths where games, based on scientific experiments, could be played by the students. These innovative science activities were very popular; we aroused much interest in the young generation and developed many early connections with potential talented scientists among these elementary school students. The event attracted 531 students from 12 elementary and junior high schools who joined us between the Banqiao and Taoyuan Stations.



Certificate of Appreciation from NSTC



Chroma stalls inside the Taoyuan Railway Station

### 6.2.3 Support for "Project Blue 1095" organized by Business Today

The "Project Blue 1095" coastal-cleanup event by Business Today aimed to promote the implementation of a circular economy. Reusable marine debris was collected for recycling and two selected Taiwan coastal areas were cleaned. Over the 1095 days period a considerable amount of marine debris was gathered which included many PET bottles. These were subsequently recycled and transformed into "new national blue-and-white slippers". We were the first Taoyuan business to support "Project Blue 1095" for two consecutive years. On September 24, 2022, 162 of our employees and their families joined the coastal clean-up at Dingliao Beach in Linkou. From the youngest at 2 years of age to the eldest at 70, we cleaned up 534 kg of marine debris including 316 PET bottles. The Chroma Cultural and Educational Foundation created a "certificate for hours-of-service learning" in 2022 for junior/senior high school students who participated in the event to encourage young people to learn about service after school.

### 6.2.4 Chroma Beach Cleanup Round 2

In 2022 the Chroma Charity Club took part in the Zhuwei Beach cleanup in Taoyuan. On November 12, 2022, the Chroma Beach Cleanup Round 2 resulted in the collection of 173.6 kg of marine debris. In 2022, 127 Chroma employees and their families voluntarily took part in coastal beach clean-up events.

These two coastal clean-ups attracted 289 volunteers who collected 707.6 kg of marine debris. We maintain our foothold in Taiwan and keep our eyes on the rest of the world. Taiwan is an island country and protection of the ocean is vitally important. The promotion of education about environmental protection is real action that we take to show our love and to give-back to this island.



Beach Cleanup press conference



"Project Blue" by Business Today



Chroma Culture and Education Foundation:  
Hours of volunteer service learning.



Coastal Clean-up Round 2

### 6.2.5 Charitable donations

We support organizations for the disadvantaged and others that need help in a spirit of giving back to society some of what we take. We believe that the responsibilities of any company include a commitment to society. We have developed sustainable strategies based on our core values. In addition to the active implementation of a number of social welfare activities, we also contribute to society by gathering resources for the future to expand our influence on social value.

Recipient	Amount (NTD)
Friends of the Police Association in Taoyuan	Total contribution in 2022 NTD\$4,771,800
Friends of the Police Association in Guishan	
The National Yang Ming Chiao Tung University Disadvantaged Students Assistance Fund The Q40027C Economic Disadvantaged Students Assistant Fund	
BOYO Social Welfare Foundation	
The Little SaplingNCTU Angel Club: Nangang Exhibition Hall activity and camping for students from remote townships.	
The Yue Chen Guang Ming Monastery	
The Paper Windmill Cultural Foundation	
The National Yang Ming Chiao Tung University IIoT Empowerment CSR The Q40034C SDGs Social Responsibility Plan	
BOYO Social Welfare Foundation	
Three smart Soapy handwashing stations for the Wan-An Elementary School in Taitung County.	
Two smart Soapy handwashing stations for the Zhangyuan Elementary School in Taitung County.	
After-school tutoring for vulnerable children: The After School Association of Taiwan.	
Boxed Snacks from the SeFun Bakery House (for use at beach clean-ups)	

### 6.2.6 The Township Handwashing Campaign

In 2022 the Chroma Cultural and Educational Foundation supported the "Township Handwashing Campaign" launched by Soapy Care by donating smart Soapy handwashing stations to Wan-An Elementary School and Zhangyuan Elementary School in Taitung County to encourage handwashing at elementary and high schools in remote townships. These devices allow children to interact with smart technology while learning how to wash their hand properly. The smart Soapy handwashing stations record the handwashing habits of each child and teachers can quickly identify any children that need help in this respect. Campus health and safety will improve after correct hand-washing becomes a habit. When this habit spreads to the children's families bacterial and viral infections will be reduced. This can be a very positive result in areas that have few medical resources or preventative medical care.



### 6.2.7 "Ecological Sustainability • the Happy Taiwan" Photography Competition

In 2022 the Chroma Cultural and Educational Foundation and Corporate Marketing Center co-organized the in-house "Desktop Calendar Photography Competition" with support from the Chroma Group (Chroma ATE, Testar Electronics, Innovative Nanotech, DynaScan Technology, and MAS Automation) to encourage employees to actively "care about" local environmental and sustainability issues. The aim of this photography competition was to impart awareness of CSR in Chroma employees as well as of our road to sustainability through energy conservation and carbon reduction. BUs, centers, and group subsidiaries sent these desktop calendars to customers and partners to implant our ESG corporate image more widely. In 2022, there were a total of 104 entries in the competition, and the 13 best works were selected for the 2023 Chroma desktop calendar.



The 2022 "Ecological Sustainability • Happy Taiwan" Photography Competition.



Officers of Chroma Cultural and Educational Foundation and award-winners.



There were 104 entries in the competition.

**Appendix I GRI  
Content Index**

Appendix I GRI Content Index

Statement of use	Chroma ATE Inc has reported in accordance with the GRI Standards for the period 1 January 2022 to 31 December 2022.
GRI 1 used	GRI 1:Foundation 2021
Statement of GRI Sector Standards	None

GRI 2

Indicator	Disclosure Requirements	Report Section or Description	Description Omitted	Page
<b>1. Organization and reporting</b>				
2-1	Organizational details	2.1 Status of operations		P40
2-2	Entities included in the organization's sustainability reporting	About the Report		P05
2-3	Reporting period, frequency and contact point	About the Report		P05
2-4	Restatements of information	About the Report		P05
2-5	External assurance	About the Report		P05
<b>2. Activities and workers</b>				
2-6	Activities, the value chain and other business relationships	3.4 Sustainable supply chain		P72
2-7	Employee	5.1.1 The Status of Staff Employment		P106
2-8	Workers who are not employees	5.5.2 Accident investigation		P112
<b>3. Governance</b>				
2-9	Governance structure and composition	2.2 Corporate governance		P47
2-10	Nominating and selecting the highest governance body	2.2.2 Board of Directors		P49
2-11	Chair of the highest governance body	2.2.2 Board of Directors		P49
2-12	Role of the highest governance body in oversight of the management of impact	2.2.2 Board of Directors		P49
2-13	Delegation of responsibility for managing impact	2.2.2 Board of Directors 1.1 Sustainable development visions and strategies		P49 P21
2-14	Highest governance body's role in sustainability reporting	1.1 Sustainable development visions and strategies		P21

2-15	Conflicts of interest	2.2.2 Board of Directors		P49
2-16	Communication of critical concerns	2.3.1 Ethical corporate management		P56
2-17	Collective knowledge of highest governance body	2.2.2 Board of Directors		P49
2-18	Evaluating the highest governance body's performance	2.2.2 Board of Directors		P49
2-19	Remuneration policies	2.2.2 Board of Directors		P49
2-20	Process to determine remuneration	2.2.2 Board of Directors		P49
2-21	Annual total compensation ratio	5.2.1 Employee Remuneration		P111

**4. Strategy, policies and practice**

2-22	Statement on sustainable development strategy	From the Chairman		P09
2-23	Policy commitments	From the Chairman 1.1 Sustainable development visions and strategies		P09 P21
2-24	Embedding policy commitments	From the Chairman		P09
2-25	Processes to remediate negative impact	2.2.2 Board of Directors		P49
2-26	Mechanisms for seeking advice and raising concern	2.3.1 Ethical corporate management		P56
2-27	Compliance	2.3.2 Legal compliance		P56
2-28	Membership of associations	2.2.3 Participation in industry groups and associations		P55

**5. Stakeholder engagement**

2-29	Approach to stakeholder engagement	1.2 Material issues and stakeholder engagement		P23
2-30	Collective bargaining agreements	5.4 Employee Communication and Care		P116

GRI 3 Material Topics 2021

Indicator	Disclosure Requirements	Report Section or Description	Description Omitted	Page
3-1	Process to determine material topics	1.2 Material issues and stakeholder engagement		P23
3-2	List of material topics			P23
3-3	Management of material topics			P23

GRI Content Index Disclosure	Chapter	Note
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Topic-Specific Disclosures 200/300/400

GRI 200: Economic Standards

<b>GRI-201 Economic Performance (2016)</b>				
201-1 Direct economic value generated and distributed	2.1 Status of operations			P40
201-2 Financial implications and other risks and opportunities due to climate change	4.3 Risks and opportunities due to climate change			P53
<b>GRI 202 Market Presence (2016)</b>				
202-1 Ratios of standard entry level wage by gender compared to local minimum wage				
202-2 Proportion of senior management hired from the local community	5.1.1 The Status of Staff Employment			P106
<b>GRI-204 Procurement Practices (2016)</b>				
204-1 Proportion of spending on local suppliers	3.4 Sustainable supply chain			P72
<b>GRI-205 Anti-corruption (2016)</b>				
205-2 Communication and training about anti-corruption policies and procedures	2.3.1 Ethical corporate management			P56
205-3 Confirmed incidents of corruption and actions taken	2.3.1 Ethical corporate management			P56

GRI-300 Environmental Standards

<b>GRI 302 Energy (2016)</b>				
302-1 Energy consumption within the organization	4.1.1 Energy management			P94
302-3 Energy intensity	4.1.1 Energy management			P94
<b>GRI 305 Emissions (2016)</b>				
305-1 Direct (Scope 1) GHG emissions	4.4.2 GHG management			P96
305-2 Energy indirect (Scope 2) GHG emissions				P96
305-4 GHG emissions intensity				P96
<b>GRI-306 Waste (2020)</b>				
306-1 Waste generation and significant waste-related impacts	4.4.2 GHG management			P99
306-2 Management of significant waste-related impacts	4.4.2 GHG management			P99
306-3 Waste generated	4.4.2 GHG management			P99
306-4 Waste diverted from disposal	4.4.3 Waste Management			P99
306-5 Waste directed to disposal	4.4.3 Waste Management			P99
<b>GRI 308 Supplier Environmental Assessment (2016)</b>				
308-1 New suppliers that were screened using environmental criteria	3.4 Sustainable supply chain			P72





GRI 400 Social Standards		
GRI 401 Employment (2016)		
401-1 New employee hires and employee turnover	5.1.2. Arrangements for New and Departing Employees	P108
401-2 Benefits provided to full-time employees that are not provided for temporary or part-time employees	5.2 Employee Remuneration and Benefits	P111
401-3 Parental leave	5.2.3 Parental leave	P114
GRI-403 Occupational Health and Safety (2018)		
403-1 Occupational health and safety management system	5.5 Occupational safety and health	P121
403-2 Hazard identification, risk assessment, and incident investigation	5.1.1 Hazard identification and risk assessment 5.5.2 Accident investigation	P122 P124
403-3 Occupational health services	5.5.6 Multifaceted health management	P132
403-4 Worker participation, consultation, and communication on occupational health and safety	5.4 Employee Communication and Care 5.1.5 Worker participation, consultation, and communication	P120 P131
403-5 Worker training on occupational health and safety	5.5.3 Occupational Health and Safety Education	P127
403-6 Promotion of worker health	5.5.6 Multifaceted health management	P132
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	5.5.4 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	P128
403-8 Workers covered by an occupational health and safety management system	5.1.1 Hazard identification and risk assessment	P122
403-9 Work-related injuries	5.5.2 Accident investigation	P124
403-10 Work-related ill health	5.5.2 Accident investigation	P124

GRI-404 Training and Education (2016)		
404-1 Average hours of training per year per employee	5.3.1. Employee Education and Training	P115
404-3 Percentage of employees receiving regular performance and career development reviews	5.3.2. Performance Management	P118
GRI-405 Diversity and Equal Opportunities		
405-1 Diversity of governance bodies and employees	5.1.1 The Status of Staff Employment	P106
GRI 414 Supplier social assessment		
414-1 New suppliers that were screened using social criteria	3.4 Sustainable supply chain	P72
GRI 418 Customer privacy (2016)		
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	2.4 Information security management	P57



**Appendix 2**

**Appendix 2 Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies (2022.09.22)**

**Table 1-14 Sustainability Disclosure Indicator - Other electronics industry**

Number	Accounting Metrics	Category	Annual Disclosure	Unit	Note
I.	Total energy consumed, percentage of purchased electricity, and rate of renewables use Total energy consumed, percentage of grid electricity, percentage renewable	Quantitative	<b>4.1.1 Energy management</b> 1. Electricity and fuel management	Gigajoules (GJ), Percentage (%)	
II.	Total water withdrawn and total water consumed	Quantitative	<b>4.1.1 Energy management</b> 2. Water resource management	Thousand cubic meters (m <sup>3</sup> )	
III.	Amount of hazardous waste from manufacturing and the percentage recycled	Quantitative	<b>4.4.3 Waste Management</b>	Metric tons (t) Percentage (%)	
IV	Categories, number and rate of occupational accidents	Quantitative	<b>5.5.2 Accident investigation</b>	Rate (%), quantity	
V	Product Lifecycle Management: Weight of end-of-life products and e-waste recovered, percentage recycled. Description of sales and other ways to recover and dispose of slag and scraps.	Quantitative	<b>4.4.3 Waste Management</b>	Metric tons (t) Percentage (%)	
VI	Description of the management of risks associated with the use of critical materials	Qualitative description	<b>3.4 Sustainable supply chain</b>	NA	
VII	Total amount of monetary loss resulting from legal proceedings associated with anticompetitive behavior regulations.	Quantitative	<b>Never happened</b>	Report currency	
VIII	Quantity of major product output by category	Quantitative	<b>2.1 Status of operations</b>	Subject to product category	

1 Describe the oversight of climate-related risks and opportunities by Management and the Board.

2 Describe how the climate-related risks and opportunities identified by the company has affected business, strategy and finance over the short, medium, and long term.

3 Describe the financial impacts of extreme weather events and transition actions.

4 Describe how the processes for identifying, assessing, and managing climate-related risks have been integrated into the overall risk management system.

5 Explain the methods, the scenarios, parameters, assumptions, and analysis factors used to assess resilience to climate change and its major financial impact.

6 If a transition plan has been made for managing climate-related risks explain the content of the plan and the metrics and targets used to identify and manage both the physical and transitional risks.

7 If internal carbon pricing has been used as a planning tool, explain the basis of the pricing system.

8 If climate-related targets are set, state the activities, scope of GHG emissions, the planning period, and annual targets. If the relevant targets had been achieved using renewable energy certificates (RECs), state the sources and amount of the carbon credit or the RECs.

9 GHG inventory and verification (also fill in 1-1).

4.3  
Climate change risks and opportunities

No assessment tool for internal carbon pricing has been used.

4.1.1  
Climate-related financial disclosures

4.3  
Climate change risks and opportunities

GHG inventory and verification

Basic Company Data  
 ■ Authorized capital: NTD4,143,594,080

According to the regulations of the Sustainable Development Roadmap of listed companies disclose  
 ■ the individual inventory of the parent company

Category 1	Total emission (tCO <sub>2</sub> e)	Intensity (tCO <sub>2</sub> e/NTD thousand)	Certification Body	Description of verification (summarize the content of the assurance report and upload the verification opinion statement of the certification body)
Corresponding chapter	4.4.2 GHG management	4.4.2 GHG management	Bureau Veritas Taiwan Branch	
Category 2	Total emission (tCO <sub>2</sub> e)	Intensity (tCO <sub>2</sub> e/NTD thousand)		
Corresponding chapter	4.4.2 GHG management	4.4.2 GHG management		
Scope 3 (voluntary disclosure)	Total emission (tCO <sub>2</sub> e)	Intensity (tCO <sub>2</sub> e/NTD thousand)		
Corresponding chapter	4.4.2 GHG management	4.4.2 GHG management		



**Appendix 3**

Appendix 3 SASB Index

Electrical and electronic equipment

Number	ACCOUNTING METRIC	Section and Description
<b>Energy Management</b>		
RT-EE-130a.1	Total energy consumed, percentage grid electricity, percentage renewable Gigajoules (GJ), Percentage (%)	4.1.1 Energy management 1. Electricity and fuel management
<b>2. Hazardous Waste Management</b>		
RT-EE-150a.1	Amount of hazardous waste generated, percentage recycled Metric tons (t), Percentage (%)	4.4.3 Waste Management
RT-EE-150a.2	Number and aggregate quantity of reportable spills, quantity recovered Number, Kilograms (kg)	4.4.3 Waste Management
<b>3. Section and Description</b>		
RT-EE-250a.1	Number of recalls issued; total units recalled	Never happened
RT-EE-250a.2	4.1.1 Energy management 1. Electricity and fuel management	Never happened
<b>4. Product Lifecycle Management</b>		
RT-EE-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	With respect to 3.4.1 Standards for Controlling Hazardous Chemical Substances in Materials, the current control is "0".
RT-EE-410a.2	Percentage of eligible products, by revenue, that meet ENERGY STAR® criteria	NA
RT-EE-410a.3	Revenue from renewable energy-related and energy efficiency-related products	2.1 Status of operations Green revenue based on EU Taxonomy

5. Materials Sourcing

RT-EE-440a.1	Description of the management of risks associated with the use of critical materials	3.4.1 Key components and control of hazardous chemical substances
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Business Ethics

RT-EE-510a.1	Description of policies and practices for the prevention of corruption and bribery and anti-competitive behavior (Discussion and Analysis)	2.3.1 Ethical corporate management
RT-EE-510a.2	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption (Reporting currency)	Never happened
RT-EE-510a.3	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations (Reporting currency)	Never happened

Activity Metrics

Number	Activity Metrics	Section and Description
RT-IG-000.A	Number of units produced by product category	2.1 Status of operations
RT-IG-000.B	Number of employees	5.1.1 The Status of Staff Employment

**Appendix 4**

Appendix 4: Declaration of Report Assurance/Opinion Statement Verification



**INDEPENDENT ASSURANCE STATEMENT**

**To: The stakeholders of CHROMA ATE INC.**

**Introduction and objectives of work**

Bureau Veritas Certification Taiwan has been engaged by CHROMA ATE INC. to conduct an independent assurance of its 2022 CHROMA ESG Report. This Assurance Statement applies to the related information included within the scope of work described below.

This information and its presentation in the 2022 CHROMA ESG Report are the sole responsibility of the management of CHROMA ATE INC. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on its content.

**Scope of work**

The assurance process was conducted in line with the requirements of the AA1000 Assurance Standard (AA1000AS) v3, Type 1 - AccountAbility Principles and Performance Information engaged. The scope of work included:

- Data and information included in 2022 CHROMA ESG Report for the 1<sup>st</sup> January, 2022 to 31<sup>st</sup> December, 2022;
- Appropriateness and robustness of underlying reporting systems and processes, used to collect, analyse and review the information reported;
- Evaluation of the Report against the main principles of the AA1000 Accountability Principle (2018)<sup>1</sup>
  - Inclusivity
  - Materiality
  - Responsiveness
  - Impact
- Evaluation of the Report against the principles of Stakeholder Inclusiveness, Sustainability Context, Materiality, Completeness, Balance, Comparability, Accuracy, Timeliness, Clarity, and Reliability, as defined in the GRI Sustainability Reporting Standards.

The levels of assurance have been applied as moderate level assurance.

**Methodology**

As part of its independent assurance, Bureau Veritas undertook the following activities:

1. Interviews with relevant personnel of CHROMA ATE INC.;
2. Review of documentary evidence produced by CHROMA ATE INC.;

<sup>1</sup> Published by AccountAbility: The Institute of Social and Ethical Accountability  
<http://www.accountability.org>



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3. Review performance data listed in report with sampling basis;
4. Visits to head office located in Taiwan, Taoyuan City;
5. Review of CHROMA ATE INC. data and information systems for collection, aggregation.

Our work was conducted against Bureau Veritas' standard procedures and guidelines for external Assurance of Sustainability Reports, based on current best practice in independent assurance.

The work was planned and carried out to provide reasonable, rather than absolute assurance and we believe it provides a reasonable basis for our conclusions.

**Our findings**

On the basis of our methodology and the activities described above, it is our opinion that:

- The information and data included in 2022 CHROMA ESG Report are accurate, reliable and free from material mistake or misstatement;
- The Report provides a fair representation of CHROMA ATE INC.'s activities over the reporting period;
- The information is presented in a clear, understandable and accessible manner, and allows readers to form a balanced opinion over CHROMA ATE INC.'s performance and status during the 1<sup>st</sup> January, 2022 to 31<sup>st</sup> December, 2022;
- The Report properly reflects the organisation's alignment to and implementation of the AA1000 Assurance Standard (AA1000AS) v3 principles of Inclusivity, Materiality, Responsiveness and Impact in its operations. Further detail is provided below;
- CHROMA ATE INC. has established appropriate systems for the collection, aggregation and analysis of relevant information;

**Alignment with the principles of AA1000 Accountability Principle (2018)**

**Inclusivity**

CHROMA ATE INC. has processes in place for engaging with key stakeholders including socially responsible investors, clients, employees, supply chain, authority, and local community, and covering material topics such as Economic, Social and Environment.

**Materiality**

The Report addresses the range of environmental, social and economic issues of concern that CHROMA ATE INC. has identified as being of highest material importance. The identification of material topics has considered both internal assessments of risks and opportunities to the business, as well as stakeholders' views and concerns.

**Responsiveness**



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CHROMA ATE INC. is responding to those issues identified as material and demonstrates this in its policies, objectives, indicators and performance targets. The reported information can be used by the organisation and its stakeholders as a reasonable basis for their opinions and decision-making.

**Impact**

CHROMA ATE INC.'s management system can monitor, measure and be accountable for how their actions affect their broader ecosystems.

**Report structure**

CHROMA ATE INC. does fully provide the information to achieve the GRI Standards 2021, and the performance indices do correspond and can be cross referenced to the content of relevant GRI Standards.

CHROMA ATE INC. does fully provide the information to achieve SASB (INDUSTRY STANDARD - ELECTRICAL & ELECTRONIC EQUIPMENT), and the performance indices do correspond and can be cross referenced to the content of relevant requirements.

**Key areas for ongoing development**

Based on the work conducted, we recommend:

- Relationship between highest governance body and ESG aspects could be improved. (RESPONSIVENESS)
- Data collection methodology could establish for long-term monitoring KPI. (INCLUSIVITY)
- Measurable objectives of continual monitoring KPIs are encouraged. (IMPACT)

**Limitations and Exclusions**

Excluded from the scope of our work is any assurance of information relating to:

- Activities outside the defined assurance period;
- Positional statements (expressions of opinion, belief, aim or future intention by CHROMA ATE INC.) and statements of future commitment.

This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist within the Report.

**Statement of independence, impartiality and competence**

Bureau Veritas is an independent professional services company that specialises in Quality, Health, Safety, Social and Environmental management with more than 190 years history in providing independent assurance services. Bureau Veritas 2022 full year revenues reached 5.65 billion euros.



Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest.

No member of the assurance team has a business relationship with CHROMA ATE INC., its Directors or Managers beyond that required of this assignment. We have conducted this verification independently, and there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, has over years combined experience in this field and an excellent understanding of Bureau Veritas standard methodology for the Assurance of Sustainability Reports.

**Bureau Veritas Certification Taiwan**

3F-B, No. 18, Nanjing E. Rd., Sec. 4, Songshan District, Taipei 10553, Taiwan R.O.C.  
20 June, 2023



**AA1000**  
Licensed Report  
000-76/V3-YXQMX

技術審查:

*Colin J.*

日期: 20/June/2023

查證人員:

*Adrian Lee*

日期: 20/June/2023

